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D. CALDWELL,

Clerk of the Eastern District of Pennsylvania.

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ENCYCLOPÆDIA AMERICANA.

INDUCTION, in logic; a conclusion from the particular to the general. Strict conclusions are made from the general to the particular. The general premise being true, the application to the particular case which is included in it follows with logical certainty. Induction gives only probability. If, for instance, we conclude, from the earth being habitable, that the other planets are so, the conclusion is only probable. Induction rests upon the belief that general laws and rules are expressed in the particular case; but a possibility always remains, that these general laws and rules are not perfectly known. An induction may be perfect or imperfect. To make it perfect, the premises must include all the grounds that can affect the result. If this is not the case, it is imperfect. For instance, every terrestrial animal lives, every aerial animal lives, every aquatic animal lives, every reptile lives; therefore, every animal lives. If we now allow that there exists no animal not included in the four enumerated classes, the induction is perfect.

INDULGENCE, in the Roman Catholic system; the remission of sin, which the church has power to grant. (We shall first give the Protestant, and then the Catholic views on this subject.) The visible head of the church, the pope, distributes indulgences in various ways. They are divided into temporary and plenary. The principle of indulgences rests on that of good works; for the Catholic theologians prove the authority of the church to issue indulgences in this way:—many saints and pious men have done more good works, and suffered more than was required for the remission of their sins, and the sum of this surplus constitutes a

treasure for the church, of which the pope has the keys, and is authorized to distribute as much or little as he pleases, in exchange for pious gifts. The historical origin of indulgences is traced to the public penances and the canonical punishments, which the old Christian church imposed on the community, especially on those who did not remain firm unto martyrdom. When ecclesiastic discipline became milder, and the clergy more covetous, it was allowed to commute these punishments into fines, for the benefit of the church. At first, the only source of indulgences was in Rome, and they could be obtained only by going there. At Rome, this treasure of the church was divided among many churches, of which seven principal ones were gifted the most largely by the popes. These churches were termed *stationes indulgentiarum*. One of the richest was the church in the Lateran, on which were bestowed, at its renewed consecration, as many days of indulgence as the drops which fall in a rain continuing three days and three nights. The whole treasure of indulgences of the churches in Rome was accordingly inexhaustible. When the popes were in want of money, and the number of pilgrims who resorted to Rome to obtain the remission of their sins began to decrease, indulgences were put into the hands of the foreign archbishops and bishops; and, finally, agents were sent about, who made them an object of the meanest traffic. During the period of jubilee (see *Jubilee*), the people were taught to believe that the efficacy of indulgences was doubled, and the richest harvests were always reaped at this time. Leo X, famous for his love of splendor, commenced his reign in 1513;

and, as the building of St. Peter's church had exhausted his finances, he began the sale of indulgences in Germany, without waiting for the jubilee of 1525, in conjunction with the elector of Mentz, who was to receive half the profit; and the latter found an excellent agent for the sale in Tetzel. This flagrant abuse inflamed the zeal of Luther, and the Protestant theologians have always found indulgences one of the most vulnerable points of the Roman Catholic system; and even the Catholic states of Germany represented to the emperor, in 1530, that he ought to prevail upon the pope, to omit sending any more letters of indulgence to Germany, lest the whole Catholic religion should become an object of scorn and mockery. Nevertheless, the right to remit sins was received, in the council of Trent, among the articles of faith. (We shall now proceed to give the Catholic views, as taken from the article *Indulgence*, written by a Catholic, in the German *Conversations-Lexicon*.) The penances of the ancient church (see *Penance*) were never so strictly binding as to preclude the presbyters from relaxing them in some degree, in particular instances, where their object seemed more easily attained in some other way. But this never was done, except in single cases, and after the circumstances of the petitioners had been closely examined; nor was the whole punishment ever remitted, but merely a part of it, according as the case of the individual required, and his repentance justified it. The council of Nice, in their 12th canon, require, for such a dispensation, proof of true repentance. In the 11th century, another kind of indulgences was introduced, —absolution. This was granted to those who undertook some difficult enterprise for the benefit of the church. This was usually bearing arms in her cause, of which the crusades are the most famous example. In the council of Clermont (1095—1096), it was decreed (canon 12), that every one, who, actuated solely by devout zeal, and not by love of glory or by avarice, went on the expedition to Jerusalem for the deliverance of the holy sepulchre, should receive a full remission of his sins. In later times, this indulgence was extended to those who were not able to go themselves, and sent a champion in their stead. By degrees, the exemption was extended still farther, and soon plenary and partial indulgences were granted to those who gave alms for effecting some good work (e. g., the restoration of a church, &c.), or performed some prescrib-

ed labor of piety (the visiting of a church, for instance) at the time of the jubilee, which was established by Boniface VIII, in 1300. This gave the death-blow to the public penance of the church. Considerable abuses, however, stole into the system of indulgences, and the scandal became very great. Under pretext of alms for the benefit of good works, indulgences were made the means of indirectly taxing the whole of Christendom. It was proposed several times in the diets of the German empire (e. g., at Nuremberg, in 1466), to make use of them for supplying the expenses of the war against the Turks. The popes, bishops and civil rulers usually divided the proceeds, though the latter sometimes appropriated them entirely; as, for instance, in 1500, when the government of the empire took possession of the money collected for the pope on the occasion of the jubilee, and allowed only a third part to the legate of the pope, for his subsistence. Under such circumstances, when holy institutions were abused for vile gain, it was natural that wrong notions respecting indulgences and their power, should spring up among the people, and be spread by the preachers employed to distribute them. (See *Tetzel*.) It is a well known fact, that the indulgences proclaimed by Leo X, gave the first spring to the reformation. It was the object of the fathers assembled at Trent, to make a public disavowal of the erroneous doctrines which had been preached by individuals respecting indulgences, that they might not appear to be sanctioned by the church. The council first required (in sess. 24, cap. 8, *De Reformatione*), the restoration of public penance, in the following words: "The holy apostle (Paul to Timothy) ordains, that those who sin publicly, should be publicly rebuked. If, therefore, a crime has been committed publicly, and in the sight of many, so as not to leave any doubt of its giving a bad example to others, a public penance is to be imposed on the guilty person, suited to the crime, that the sight of his repentance may recall those to the right way, whom his example has led astray. The bishop may, however, substitute a private for the public penance, if he thinks it more suitable." Respecting absolution itself, the church has established no dogma, because such dogmas are expressed only in the *canones*, of which there exist none on this subject. She has given only a decree, and this in her last session, which literally says: Since the power of conferring indulgences has been given to the church

by Christ, and she has exercised it from the earliest times, the holy council teaches and ordains, that this usage, so beneficial to Christians, and confirmed by the authority of many holy councils, is to be retained in the church; and she inflicts the anathema upon such as either declare indulgences unnecessary, or dispute the power of the church to grant them. It is her wish, however, that in the grant of indulgences, according to the custom long existing in the church, proper limits should be observed, lest the discipline of the church become injuriously relaxed. But as the church desires that the abuses which have crept in, and have given occasion to heretical preachers to heap reproach upon this venerable usage, should be corrected, she ordains by the present decree, that the shameful bartering of indulgences for money, which has been so fruitful a source of abuse, shall be entirely abolished. As the corruptions which have sprung from superstition, ignorance, irreverence, or from any other causes, cannot here be enumerated and individually censured, on account of the variety of the kinds prevailing in different places and provinces, the synod commands every bishop to search out with diligence the abuses of his own church, and to lay them before the first provincial synod, that they may be branded as errors by the judgment of the other bishops, and be submitted to the authority of the supreme bishop at Rome, whose wisdom will provide for the universal good of the church, that the sacred indulgences may in future be distributed with purity and holiness. The selling of indulgences has accordingly ceased. In regard to the absolution still practised in the church (continues the Catholic writer), the spirit of the church is the same as in ancient times. The old discipline of penance never has been formally abolished. On the contrary, the principle has rather been confirmed by the council of Trent, as has just been shown. The church still commissions her servants to impose penances upon sinners, in proportion to their guilt,—even heavier penances than the ordinary ones. Why, then (he asks), should she not be authorized to remit part of the sentence, if the penitent is found worthy of favor? Whether such remission be deserved by the penitent, is to be judged by those ministers of the church who are in immediate intercourse with them. To make absolution effectual, Bellarmin requires that the end attained should be more agreeable to God than the performance of the

penance remitted. The labor itself should be in proportion to its aim. We have seen that there exists no dogma on absolution; it is therefore by no means a doctrine of the church, but it is left to the private views of the individuals, whether and how far the absolution and the idea of purgatory (see *Purgatory*), are connected with each other. It is falsely believed by many Protestants, that absolution is esteemed by the Catholic church equivalent to conversion, and as effectual to remit the punishment of sins. Every popular catechism proves the contrary.

INDUS, or SINDH*; a large river in the western part of Hindoostan, rising on the north of the Himalaya mountains; it flows first north-west, then west, penetrates the chain of mountains in the 36th parallel, then takes a winding course to the south, and empties by several mouths into the sea of Arabia, between lat. 23° 20' and 24° 40' N. Its chief tributaries are from the east; they were known to the Greeks. One of them is the Behât or Jelam (*Hydaspes*), from Cashmere; it joins the Chenab (*Acesines*), which also receives the Ravy (*Hydraotes*); below the confluence of the Chenab is that of the Kirah (*Hyphasis*), formed by the junction of the Setledje or Satadrou (*Hesidrus*) and the Beyah. The country traversed by the Indus and its tributaries is called the *Penjab* or *Punjab*. The water of the Indus is wholesome, and resembles that of the Ganges. Its course, including its windings, is estimated at 1700 miles, and is generally W. of S. The Delta of the Indus is about 150 miles in length along the coast, and 115 in depth. The river is navigable, for vessels of 200 tons, to the province of Lahore, a distance of 760 geographical miles. From Attack to the Delta, a distance of about 800 miles, its breadth is generally about a mile, and its depth from two to five fathoms. The tide sets in with great violence. Owing to the barbarous manners of the tribes which inhabit its banks, little commerce takes place on this river. The bed of the Indus is sand, with a small quantity of mud.

INES DE CASTRO. Pedro, son of Alphonso IV, king of Portugal, after the death of his wife Constantia (1344), secretly married his mistress, Ines de Castro, who was descended from the royal line of Castile, from which Pedro was

* The name is very ancient. *Indus* is from the Greek, which borrowed it from the Persian. The Persians seem to have derived it from the Indian *Sind'hu*, ocean.

also descended on his mother's side. As he steadily rejected all propositions for a new marriage, his secret was suspected, and the envious rivals of the beautiful Ines were fearful that her brothers and family would gain a complete ascendancy over the future king. The old king was easily blinded by the intrigues of his artful counsellors, Diego Lopez Pacheco, Pedro Coêlho and Alvarez Gonsalvez. They persuaded him that this marriage would be prejudicial to the interests of his young grand-son Ferdinand (the son of Pedro by his deceased wife). Alphonso asked his son if he was married to Ines. Pedro dared not confess the truth to his father, much less would he comply with the command of the king, to renounce his mistress and unite himself to another. Alphonso again consulted his favorites, and it was resolved to put the unhappy Ines to death. The queen Beatrice, mother of the Infant, obtained intelligence of this cruel design, and gave her son notice of it. But Pedro neglected not only this information, but even the warning of the archbishop of Braga, as a rumor intended merely to terrify him. The first time that Pedro left Ines, to be absent several days, on a hunting expedition, the king hastened to Coimbra, where she was living in the convent of St. Clara with her children. The arrival of Alphonso filled the unhappy lady with terror; but, suppressing her feelings, she appeared before the king, threw herself with her children at his feet, and begged for mercy with tears. Alphonso, softened by this sight, had not the heart to perpetrate the intended crime. But after he had retired, his evil counsellors succeeded in obliterating the impression which had been made on him, and obtained from him permission to commit the murder which had been resolved on. It was executed that very hour; Ines expired under the daggers of her enemies. She was buried in the convent where she was murdered (1355). Pedro, frantic with grief and rage, took arms against his father, but the queen and the archbishop of Braga succeeded in reconciling the father and son. Pedro obtained many privileges; in return for which, he promised, on oath, not to take vengeance on the murderers. Two years after, king Alphonso died; the three assassins had already left the kingdom, by his advice, and taken refuge in Castile, where Peter the Cruel then reigned, whose tyranny had driven some noble Castilians into Portugal. Pedro agreed to exchange these fugitives for the murderers of Ines. Hav-

ing delivered them to their master, he received, in return, the persons of Pedro Coêlho and Alvarez Gonsalvez; the third, Pacheco, escaped to Arragon. The two were then tortured in the presence of the king, in order to make them disclose their accomplices; their hearts were torn out, their bodies burnt, and their ashes scattered to the winds (1360). Two years after, he assembled the chief men of the kingdom, at Cataneda, and solemnly declared on oath, that, after the death of his wife Constantia, he had obtained the consent of the pope to his union with Ines de Castro, and that he had been married to her in the presence of the archbishop of Guarda and of an officer of his court, Stephen Lobato. He then went to Coimbra. The archbishop and Lobato confirmed the assertions of the king; and the papal document, to which the king referred, was publicly exhibited. The king caused the body of his beloved Ines to be disinterred, and placed on a throne, adorned with the diadem and royal robes, and required all the nobility of the kingdom to approach and kiss the hem of her garment, rendering her when dead that homage which she had not received in her life. The body was then carried in a funeral car to Alcobaca. The king, the bishops, the nobles and knights of the kingdom, followed the carriage on foot; and the whole distance, from Coimbra to Alcobaca, was lined on both sides by many thousands of people, bearing burning torches. In Alcobaca, a splendid monument of white marble was erected, on which was placed her statue, with a royal crown on her head. The history of the unhappy Ines has furnished many poets, of different nations, with materials for tragedies,—Lamothe, count von Soden, &c.; but the Portuguese muse has immortalized her through the lips of Camoens, in whose celebrated *Lusiade*, the history of her love is one of the finest episodes.

INFALLIBILITY; exemption from the possibility of error. God, of course, is infallible, because the idea of divinity excludes that of error; Christ was infallible, and, according to the belief of the Greek and Catholic church, and of most Protestant sects, the apostles were also infallible, after the descent of the Holy Ghost. Here, however, the Protestants and Catholics divide. The latter, founding their creed on *tradition* (q. v.) as well as on the *Bible*, maintain that the tradition, that is, the general doctrine and belief, handed down from age to age, and taught by the great

body of the pastors, is above the possibility of error ; consequently, also, the councils are infallible, because the councils, according to a Catholic writer, "do not make truths or dogmas, as some Protestants maintain, but merely express the belief of the church on certain points in question : " the truth pronounced, therefore, always existed, but had not been previously declared by the church. From several passages in the Bible, the Catholic infers that the above-mentioned tradition and the councils are under the continual guidance and influence of the Holy Ghost : hence the formula so often repeated by the council of Trent, the last general council of the Catholic church—"the holy council lawfully assembled under the guidance of the Holy Ghost." It is clear, that, if the councils are infallible, it is of the utmost importance for the Catholic to know what are lawful councils. This is a point which, as may be easily conceived, has created great discussions in the Catholic church, because the popes claimed the sole right to convoke councils. (See *Council*.) So far all Roman Catholics agree respecting infallibility, namely, that Christ, the apostles, the body of the pastors, the traditions of the church, and the councils, are infallible ; but they disagree respecting the infallibility of the pope. The ultramontane theologians maintain that the pope is infallible, whenever he pronounces dogmatically on a point of doctrine, to settle the faith of the whole Catholic church. These theologians are therefore called *infallibleists*. The theologians of the Gallican church do not admit this infallibility. The assembly of the French clergy, in 1682, laid down the maxim, "that in questions of faith, the sovereign pontiff has the chief part, and that his decrees concern the whole church ; but that his judgment is not irreformable, until it be confirmed by the acquiescence of the church." Bossuet, in his *Defensio Declarat. Cleri Gallic.*, 2d part, l. 12 seq. has treated this point at length. He maintains, that the pope is by no means infallible, and that a papal decision is not to be considered infallible until the church acquiesces in it, which, he admits, may be done, in general, silently.—In politics, the word *infallible* is used in a different sense. The position that any political person, or body, is infallible, only means, that there is no appeal from such person or body. When the English public law declares that the king can do no wrong, every one knows that this is merely a political fiction. But the genuine supporters of di-

vine right believe in a somewhat more real political infallibility of kings.

INFANT, in law. By the English, and generally by the American, and so by the French law, persons come to majority at the age of twenty-one years, until which time they are called in law *infants*, and are under guardianship or tutelage. The laws of some of the U. States, however, make a distinction between males and females, the age of eighteen being that of majority in females. Infants cannot, in general, bind themselves by contracts, as they are supposed not to have sufficient discretion for this purpose. But this is their privilege, and their contracts are accordingly held in general not to be void, but only voidable at their election ; and they may elect to avoid their contracts during their minority, but they cannot confirm them so as to be bound by them, until their majority. Infants may possess property, but it must be under the management and control of a guardian. They have not the right of citizens as to voting, and discharging other political functions. But in regard to crimes and punishments, and trespasses and private wrongs, their conduct is regulated by the same laws as that of the other members of the community, in case of their being of sufficient age and discretion to understand their duties and obligations. And for this purpose no general limit can be assigned, as some children are much more intelligent than others of the same age ; and it will again depend, in some degree, upon the nature of the offence committed, or the wrong done, whether a child of any given age can be considered legally guilty of it, since some offences and wrongs can be more easily understood to be such than others. The law, in general, has a tender regard to youth, and does not permit them to be convicted and punished for offences and trespasses, unless it appears clearly that they have sufficient knowledge and discretion to distinguish them to be such.—There are exceptions to the incapacities of minors as to contracting, and these exceptions are made for their benefit. Thus an infant not sufficiently furnished with necessary clothes, food or instruction, by his parent or guardian, and not being under the immediate superintendence of the parent or guardian, may make a valid contract, in respect to those subjects, and such contract may be enforced against him. Another exception to the general incapacity of infants to contract, relates to the contract of marriage, which, by the law of England and

the U. States, may be made by a male at the age of fourteen, and by a female at that of twelve. The French code fixes the age for making a valid marriage contract, in the case of the male, at eighteen, and in that of the female at fifteen. And as the law gives validity to the principal contract, the prevalent doctrine, though subject to some doubt as to the extent of its application, is, that all contracts collateral and incidental to that of marriage, such as making marriage settlements by the husband, and accepting them instead of dower by the wife, are equally binding on both of the parties, being of age to contract marriage, and, accordingly, not subject to be revoked either before or after coming to the age of majority. If, however, one party be under the age at which a contract of marriage may be made, he or she may, on arriving at such age, either ratify or annul any such contract previously made. The jurisdiction in respect to infants is generally vested in either probate or orphans' courts, in the U. States. These courts appoint guardians to take charge of the property of infants, and, in case of the decease of the father, to take charge of their persons; but, during the life of the father, he has the guardianship and control of the persons of his sons until they are twenty-one years of age, and of his daughters until they are either eighteen or twenty-one. At a certain age, however, that is, twelve or fourteen, the child, in case of the decease of the father, may choose his own guardian, who, being approved by the proper judge, is appointed accordingly. (See *Infante*.)

INFANT SCHOOLS. (See *Schools*.)

INFANTADO, duke of, a Spanish grandee of the first class, born 1773, was educated in France, under the eye of his mother, a princess of Salm-Salm. In the war of 1793, he raised a regiment in Catalonia at his own expense. The prince of the Asturias formed an intimate union with him, because the duke showed an aversion to Godoy, the king's favorite. Godoy therefore obtained an order, in 1806, for the duke to leave Madrid. He became, in consequence (1807), still more intimately connected with the prince (see *Ferdinand VII*), who appointed him, in case of the death of the king, captain-general of New Castile. This appointment involved him in the affair of the Escorial; the attorney-general of the king demanded sentence of death against the duke and Escoiquiz; but the popular favor towards him, and

the intercession of the French ambassador Beauharnais, prevented the sentence. In 1808, the duke accompanied Ferdinand VII to Bayonne. July 7, 1808, he signed the constitution prepared by Napoleon, at Bayonne, for Spain, and became colonel in the guards of king Joseph; but he soon after resigned his post, and summoned the nation to arm against the French, and was consequently denounced as a traitor by Napoleon, Nov. 12, 1808. In 1809, he commanded a Spanish division, but was twice defeated by Sebastiani; and, notwithstanding his courage, he lost the confidence of the supreme junta, who deprived him of his command. He then retired to Seville. In 1811, the cortes appointed him president of the council of Spain and the Indies, and ambassador extraordinary to England. In June, 1812, he returned to Cadiz. From hence he went to Madrid, after the French had been driven from that capital, in 1813, but was obliged to withdraw from that city, by the command of the junta, as one of the chiefs of the Servile party (*los serviles*). Ferdinand VII, however, recalled the duke, made him president of the council of Castile, and treated him with distinguished favor. On the establishment of the constitution in 1820, he resigned his place, and retired to his estate near Madrid, but was banished to Majorca. In 1823, he was appointed president of the regency which was established by the French at Madrid during the war. In August, he went with Victor Saez to Puerto Santa Maria, to resign the government into the hands of the king, who made him a member of the council of state. The duke formed the plan for the organization of the regiments of guards, and obtained for the king (1824) the sum of 100,000 florins, for his journey to Aranjuez. In October, 1825, he succeeded Zea as first minister, and changed Zea's deliberative junta into a council of state; but the machine of state, which the apostolic party checked in its course, could not be put effectually in motion. The duke contributed 500,000 francs, the amount of his income for one year, to the necessities of the state, and in October, 1826, obtained his discharge.

INFANTE, or INFANT (a word derived from the *Latin*, signifying *child*); the title given, particularly in Spain and Portugal, to the princes of the royal house, the eldest being also called *el principe*. The princesses at these courts are called *infanta*, the eldest also *la princesa*.

INFANTRY.* If cavalry (q. v.) are to be called *l'arme du moment*, the great work of the battle is to be performed by the infantry, which composes the greatest part of an army, and is, in point of character, the most important part, because it can be used every where—in mountains, on plains, in woods, on rivers, and at sea, in the redoubt, in the breach, in cities and fields, and, depending only on itself, has a great advantage over the two other classes of troops, who, depending, in a great measure, for their efficiency on the strength and the will of brutes, are far less fitted to endure deprivation, and a noxious climate, to contend with the snows of Russia, or the deserts of Egypt. The infantry are preëminently the moral power of armies; and on no class of troops has a general, who knows how to act on his soldiers, such influence. Foot-soldiers were armed, in old times, with a spear, sometimes with a sword, arrows, lance and sling; at present, with a gun and bayonet, which is generally accompanied with a sword. Sometimes, but rarely, they are armed with pikes. Some foot-soldiers, in most armies, have rifles, generally so constructed that the rifleman may put his short sword on the rifle, to be used as a bayonet, though this has proved of no great service. The sword given to foot-soldiers, in almost all armies, is of but little advantage, and is generally intended principally for ornament, to complete the soldierlike look, rather than to be used in fighting. It serves, however, for cutting branches, to be used in cooking and building huts; but swords might be given to foot-soldiers, similar to the sailors' cutlasses, which would answer all these purposes, and also the chief end—to fight. (See *Cutlass*.) They ought always to have a sufficient guard for the hand. The foot-soldier has no defensive covering, or very little. The greatest is his mantle, rolled up, and worn on one shoulder by the Prussian and Russian troops. The helmet or cap protects the head, and epaulettes (q. v.) are sometimes

used to protect the shoulders. The thick cue, with wire in it, has sometimes been considered a defence to the neck. Infantry is divided into light infantry and that of the line. The latter forms the great mass, which is intended to fight in line, to decide attacks by the bayonet, to make assaults, and is itself again divided into grenadiers (q. v.) and musketeers. The light infantry is particularly intended to serve in the outposts, to act as sharpshooters, to make bold expeditions, and harass and disquiet the enemy. It includes the riflemen. The light infantry form from the 30th to the 60th part of an army. The character of military operations, however, has changed of late so much, that, in a good army, it is necessary that the infantry of the line should take part readily in the light service, and the light infantry be ready to fight in the line, from which the riflemen only are excepted. These are only used as sharpshooters. In some armies, there are, besides the riflemen, whole regiments of light infantry; in others, as in the Prussian army, each regiment has two battalions of infantry of the line, and one battalion of light infantry; in others, as in the French, each battalion has its grenadiers and *tirailleurs* (sharpshooters). Infantry is divided into battalions (q. v.), these into companies, these into platoons. Several battalions, two or three, sometimes four and five, form a regiment. The tactics of infantry admit three different modes of arranging this species of troops in battle—1. in line, when they are drawn up in line two or three men deep, an order very rarely, if ever, used at present; 2. in column, when several lines, three or two men deep, are drawn up one behind the other (see *Column, in Tactics, and Square*); 3. in dispersed order. (See *Sharpshooters*.) The excellence of infantry depends on their good order in advancing and retreating, perfect acquaintance with their exercises and duties, in a just application of their fire, and great calmness both in assaulting and when assaulted in the square, which is acquired by experience. As long as the infantry remain calm, the general need not lose hope; but all is to be feared when they are disordered, whether through ardor or fear. In countries affording horses, men always prefer, in the early periods of society, to fight on horseback, and civilization only gives more importance to infantry. Where foot-soldiers exist, at this early period, together with cavalry, they are considered of inferior consequence. The Hebrew

* Though the word is immediately derived from the Italian *infanteria* and *fanteria*, it is primarily of German origin. We find still, in the dialect of Lower Saxony, *Fant* and *Vent*, signifying a young, unmarried man, and, in a more extended meaning, a servant, a soldier on foot. The Icelandic *fant*, Italian *fante*, Danish *fant*, Swedish *fante*, have the same meaning with the Low-Saxon *Vent*, and are, no doubt, connected with the Latin *infans*. With the prefixed sibilant, this root became, in Anglo-Saxon, *swein*, in English *swain*, in Danish *svend* (a youth employed in country service, a young lover).

army, however, consisted, for a long time, of infantry only. (See *Cavalry*.) The Egyptians, likewise, seem to have used cavalry little. With the Asiatics, besides the use of infantry and cavalry, princes and noblemen fought on chariots. The infantry was the part least esteemed, and, with the Persians, consisted of the heavy-armed, the slingers and archers. Probably this was one reason of the victories of the Greeks over the Persians, as they had cultivated infantry more, and had given up the chariots, described by Homer as common in the Trojan war. Even their kings and generals fought on foot. They had both heavy and light infantry. The Greeks were conquered, in their turn, by an improved form of infantry, the columns of Philip of Macedon, which also enabled his son Alexander to conquer the Persians. With the Romans, infantry was the strength of the armies. Their legions, consisting mostly of infantry, conquered the world. With the ancient Germans and Gauls, also, infantry was considered very important; but when, in the great migration of nations, the Huns, and other Mongolic tribes, arrived in Europe, on small and fleet horses, and carried victory with them, spreading the terror of their arms far and wide, and when the Franks in Northern Spain became acquainted with the Moors, who came from Arabia, and the plateau of Asia, on beautiful horses, cavalry was considered as more important. When the feudal system was developed, the horse, of course, was more agreeable to the adventurous knight, than the foot service. The crusades, where the Europeans were obliged to fight with the fine cavalry of the Seljooks, favored this tendency still more. Infantry fell into total disrepute, and consisted of the poorer people, who cared little in whose service they fought, in those times of violence and oppression, when a change of rulers made no change in their sufferings; and no reliance could be placed upon them. Among those people who were not in feudal bondage, and fought for the defence of their own liberty, infantry maintained its old importance, as with the Swiss, on several occasions in the 14th and 15th century; and the penetrating Machiavelli, who burned to free his country from its numberless foreign and native tyrants, saw the great value of infantry, and urged its establishment upon a respectable footing. The invention of gunpowder changed the whole art of war, and brought infantry again into repute. (See *Army*.) The Swedish infantry, in

the thirty years' war, was excellent. The arrangement became, in the course of time, more judicious, and all unnecessary manœuvring was avoided. The Austrians, at this time, employed soldiers from their Turkish frontiers—the Croats and Pandoors, semi-savages—as a sort of irregular light infantry; and other armies had troops of a similar character; but they were so rude and disorganized, because their warfare was little better than legalized robbery, that Gustavus Adolphus would not admit them into his forces; but Frederic the Great again established free corps (q. v.) during the seven years' war. Infantry remained without much change in the 18th century. Prince Leopold of Dessau, during this time, first introduced, in the Prussian army, the iron ramrod, the lock-step, and several other improvements. The bayonet having been invented already in the middle of the 17th century, came more and more into use, and enabled the squares to resist the cavalry; but a great change in the use of infantry took place towards the end of the 18th century, when, in the American war of independence, the people, being obliged to contend, without discipline, against well trained troops, adopted the irregular mode of fighting, protected by trees or other objects, being, at the same time, mostly skilful marksmen. The efficiency of this method of fighting was evident; and when, in 1791, the French revolutionary war began, the French sent swarms of *tirailleurs* against the allies, and injured them exceedingly. In the wars from 1791 to 1802, the French greatly improved this way of fighting, which, in the interval of peace that followed, was reduced to a system, the consequences of which were seen in 1805, 1806, and 1807, against the Austrians, Prussians, and Russians. These nations, after the disasters which they suffered, adopted the same system, as well as the greater use of columns, particularly as the ordinary mode of arranging the troops before they came into the fire. Under equal circumstances, well trained infantry is almost uniformly successful against any other kind of troops.

INFERIE, in Roman antiquities; sacrifices offered to the infernal deities for the souls of the departed. Some writers have thought that they are the origin of the exequies of the Catholic church.

INFERNO (Italian for *hell*); the name of the first part of Dante's grand poem. (See *Dante*.)

INFINITESIMALS. (See *Calculus*.)

INFINITIVE; the indefinite mode, in which the verb is represented without a subject. As the verb expresses an action, or a state, it generally belongs to a subject whose action or state is expressed; but if we wish to express the mere idea of this action or state, we use the infinitive, which therefore, in many languages, is employed without further change, as a substantive—for instance, in Greek and German—only preceded by the neuter article; but, as the verb expresses an action or state, under certain conditions of time, the infinitive can also express the action or state in the present, past or future, though these conditions are not expressed in all languages by peculiar forms; nay, some languages have not even a peculiar form for the infinitive present, and must express it by some grammatical contrivance, as is the case in English. (See *Verb.*)

INFLAMMATION OF THE INTESTINES. (See *Enteritis.*)

INFLEXION, POINT OF, in the theory of curves; that point in which the direction of the curve changes from concavity to convexity, and *vice versa*. It is particularly called *punctum inflexionis*, at the first turning, and *punctum regressionis* when the curve returns. These points are of much interest in the theory of the functions.

INFLUENZA (Italian, *influence*); a term used in medicine to denote an epidemic catarrh which has, at various times, spread more rapidly and extensively than any other disorder. It has seldom occurred in any country of Europe, without appearing successively in every other part of it. It has sometimes apparently traversed the whole of the Eastern continent, and, in some instances, has been transferred to America, and has spread over this continent likewise. The French call it *la grippe*. In all the known instances of its occurrence, from the 14th century, its phenomena have been pretty uniform, and have differed little, except in severity, from those of the common febrile catarrh. In 1802, such an influenza attracted universal attention. In February, it set out from the frontiers of China, traversed all Russia, extended along the Baltic, to Poland and Denmark; reached Germany and Holland in April and May, and France and Spain in June. It could even be followed to Gibraltar. No sex, age or state of health was exempted. It showed itself chiefly as a severe cold, attended with a catarrhal fever of a more or less inflammatory or bilious character.

Generally, it passed over within a few days, yet, in some places, it gave a check to business. Few persons died of it, except those who were afflicted at the same time with other diseases, but almost every one was attacked. G. F. Mort, a German physician, attempted to prove that Europe suffered periodically from the influenza. He maintained that, during the greater part of the period which had elapsed since 1712, this epidemic had visited Europe, at intervals of about 20 years, and still more frequently in the early part of the period. Accordingly, he prophesied a new one for 1820, which, however, did not happen.

INFORMER. To encourage the apprehending of certain felons, divers English statutes of 1692, 1694, 1699, 1707, 1720, 1741 and 1742, granted rewards of from 10 to 50 pounds sterling, to such as should prosecute to conviction highwaymen, counterfeits, and thieves. These acts were passed at the time of the troubles in Great Britain, occasioned by the risings of the Jacobites, when, with the increase of political criminals, the number of private offenders was thought to be increasing also. By the law of 1699, besides the £40, an immunity from all parish offices (overseer of the poor, churchwarden, &c.) was allowed to any person who should prosecute to conviction a felon guilty of burglary, horse-stealing, &c. The *Tyburn tickets* (as the certificates of exemption were called) could be sold, as the first was of no use to a man who received a second, and were actually sold in large cities, like Manchester, at high prices (from 250 to 300 pounds sterling). The amount of the rewards (without including the Tyburn tickets), in the 40 counties of England, for 1798, was £7700, and, in 1813, it had risen to £18,000. The abuses which originated from this system were horrible. The police officers made a trade of it, by seducing poor, ignorant persons, chiefly foreigners, to crimes (principally the issuing of counterfeit money), in order to gain the reward by prosecuting them for the offence. A certain McDaniel confessed (1756) that he had caused, by his testimony, 70 men to be condemned to death. He was brought to the bar with two others, but the people, fearing they were to be acquitted, treated them with such violence, that they were killed on the spot. In 1792, a similar case happened, in which 20 men had become the victims of an informer. A more recent case, in 1817, excited greater indignation. Four

police officers, who had entered into a conspiracy against the life of poor men, were condemned to death, but, on account of some judicial formalities, were released by the 12 judges (the united members of the three chief tribunals in Westminster hall), and escaped without punishment. They had induced several poor women to pass counterfeit money, and seized them in the act. In other cases, such men endeavored to change a small offence into a capital crime; for instance, if one had stolen the work-bag of another, they swore that it had been tied with a string or ribbon to the arm, and torn from it by violence, by which theft was transformed into robbery, and, instead of imprisonment, the punishment was death, and the informer received the price of blood (£50). A revolting case of this kind happened (1817) when two soldiers, who were wrestling with another, in sport, for a wager of one shilling, were condemned for robbery by the artifice of a police officer, and escaped with the greatest difficulty from an undeserved punishment. Small offences were kept secret by the police officers, and the perpetrators watched, until, as they termed it, *they weighed 40 pounds sterling*. For prosecution to conviction of any person attempting to pass counterfeit bank notes (which is a capital crime), the bank pays £30, and, for the prosecution of a person issuing counterfeit coin, £7. Several persons have become the victims of this provision. The police officers very well knew the counterfeiters, and those who made it a trade to induce women and children to change their false notes, and deliver them into the hands of the police; but they spared the true authors of the crime, as good customers, and denounced the poor wretches employed by them, who were condemned by the jury upon the slightest suspicion, and executed without mercy. Alderman Wood asserted, in parliament, that, in the year 1818, at a visitation of the prison, he had found 13 men, mostly Irishmen and Germans, who had received counterfeit money from others, to buy bread, had been seized in the act, and condemned, without any regard to their assertions that they were ignorant of the character of the money. These rewards were abolished in 1818, by an act of parliament (58 George III, c. 70), but the abuse in respect to the bank notes remained as before. The desire of obtaining the rewards for the conviction of offenders has recently tempted the police officers to prosecute unhappy individuals,

who, during the hard times, complained loudly against the government, and accused it of injustice and hostility to the middling class of citizens.

INFULA was, with the Romans, the wide, white woollen ornament of the head of priests, vestals, and even of animals offered for sacrifice, the hiding of the head being considered a mark of humiliation. At later periods, the imperial governors wore the *infula* as a sign of dignity, and, as such, it was adopted, in the 7th century, by the bishops of the Catholic church, who continue to wear it on solemn occasions, and have it, instead of a crown or helmet, in their coat of arms. It consists of two pieces, turning upward, of a pointed form, one before and one behind, so that in the middle there is a hollow. They are of pasteboard, or tin, and covered with white silk, the one in front being ornamented with a cross. The bishops of the church of England have an *infula* still in their coat of arms, but never wear it on the head. With them, however, it is generally called *mitre*, from *mitra*, which, according to Von Hammer, originally meant the globular part of the head-dress of Persian kings, indicating, originally, the ball of the sun, which the Persian kings wore on the crown, and the Egyptian on the head. Mithra was the genius of the sun, with the Persians. (See *Mithra*.)

INGE; a Saxon word signifying *field*, appearing in many German geographical names, as *Thüringen*, *Tübingen*, *Zophingen*, &c.; also in Dutch names, as *Gröningen*.

INGEMANN, Bernhard Severin, born in 1789; one of the most distinguished Danish poets. The works of his countryman Oehlenschläger had great influence upon his productions. His patriotic odes, particularly that to the *Danebrog* (the Danish Flag), shows great poetical spirit; but his epic, the *Black Knights* (Copenhagen, 1814), an allegoric poem, in nine cantos, like Spenser's *Fairy Queen*, often suffers from the length to which the allegory is protracted, though it contains real beauties. *Masaniello* and *Blanca* are Ingemann's most celebrated tragedies. He has also written much in prose.

INGENHOUS, John, a naturalist, born at Breda, in 1730, practised physic in his native city, and afterwards went to London, where he was well received by Pringle, the president of the royal society. The empress Maria Theresa, having lost two children by the small-pox, ordered her ambassador at London to send her an

English physician, to vaccinate the others. Pringle recommended Ingenhous, who received honors and presents, at Vienna, for the easy operation, which was not then much practised. He then travelled, and finally settled near London, where he died 1799. He was the author of several treatises on subjects of natural history, which he enriched by several important discoveries.

INGOT, in the arts, is a small bar of metal made of a certain form and size, by casting it in moulds. The term is chiefly applied to the small bars of gold and silver, intended either for coining or exportation to foreign countries.

INGRIA; a former province of Sweden, on the bay of Finland. It belonged, as early as the 13th century, to Russia, was inhabited by the Ingrians or Ishorians, and received its name from the river Inger, the former name for Ishora, when the Swedes took possession of it in 1617. In 1700, the Russians reconquered it. It forms, at present, a part of the government of St. Petersburg, in which the capital, St. Petersburg, is situated.

INGULPHUS, abbot of Croyland, and author of the history of that abbey, was born in London about 1030. He received his early education at Westminster, and afterwards went to Oxford, where he applied to the study of Aristotle, and, as he says, "clothed himself down to the heel in the first and second rhetoric of Tully." In the year 1051, William, duke of Normandy, then a visitor at the court of Edward the Confessor, made Ingulphus, then of the age of 21, his secretary. He accompanied the duke to Normandy, afterwards went on a pilgrimage to the Holy Land, and, upon his return, entered into the order of the Benedictines, at the abbey of Fontenelle, in Normandy, of which he became prior. On the acquirement of the crown of England by William, Ingulphus was created abbot of the rich monastery of Croyland. He died in 1109. His history of the monastery of Croyland is interspersed with many particulars of the English kings. It was published by sir Henry Savile, in 1596, among the *Scriptores post Bedam*, and has been reprinted both at Frankfort and at Oxford, the latter of these editions, dated 1684, being the most complete. The history of Croyland comprises from 664 to 1091.

INHABITANCY. (See *Domicil*, vol. iv, p. 613.)

INHERITANCE. (See *Descent*, and *Estates*.)

INJECTIONS belong partly to surgery and partly to anatomy. In surgery, fluids, different, according to the different effects desired to be produced, are thrown, by means of a small syringe, into the natural cavities of the body, or those occasioned by disease, partly to remove unhealthy matter, and partly to bring the remedy immediately to the seat of the disorder, and thus effect a cure. Wounds and sores are usually cleansed in this way, when they extend far below the skin, or an excitement and cure are produced by the same method. Cato the Censor had one applied to himself when he suffered from a fistula. In diseases of the nose and the cavities connected with it, in those which have their seat in the neck, in disorders of the ears, the bladder and urethra, the uterus and vagina, and for the radical cure of hydrocele, injections are often used, and with important advantages. Pure warm water is injected, with the highest success, for the removal of pus, blood, or even foreign bodies. Sometimes astringent medicines, to restrain excessive evacuations, sometimes stimulating ones, to excite inflammation, as in hydrocele, or even to increase and improve evacuations, sometimes soothing medicaments, to mitigate pain, &c., are added to the water. In diseases of the throat which hinder the patient from swallowing, and thus tend to produce death by starvation, nourishing fluids are injected into the stomach. The blood of beasts, or of men, has been sometimes injected into the veins, which is called *transfusion*. In the same way, medicines are introduced immediately to the blood; for instance, tartar emetic to excite vomiting, if a foreign body is fixed in the throat so firmly as to restrain the patient from swallowing, and can neither be moved up nor down. According to the place where the injection is to be made, the instrument must be either longer or shorter, a straight or a curved tube. The size is regulated by the quantity of the liquid to be injected, and the force which is to be applied. Anatomists inject into the vessels of bodies various colored fluids, which are liquid when hot, and coagulate when cold, to make the smaller ones visible. Thus the arteries, veins and lymphatic vessels are injected. Anatomy has carried this art so far as to make very minute vessels visible to the naked eye.

INJUNCTION is a prohibitory writ, issuing by the order of a court of equity, restraining a person from doing some act which appears to be against equity, and

the commission of which is not punishable by the criminal law. An injunction may be obtained to stay waste, as where a tenant for life, or years, is proceeding to cut down timber which he has no right to cut; to prevent vexatious litigation in the courts of common law, as where a man persists in bringing actions to recover an estate, notwithstanding repeated failures; to enable a man to make a just defence, which he could not make at common law, as where the legal defence to a claim rests exclusively, or to a great degree, in the knowledge of the party advancing the claim; to prevent infringement of a copyright, or a patent, &c.

INJURIA (*Latin*), in law; properly, every act by which some one suffers unlawfully. In the Roman law, the obligations arising from such violations formed a class by themselves, which were regulated by the *lex Aquilia*, so called because the tribune Aquilius (in the sixth century, between the destruction of Carthage and Corinth, and during the beginning of the civil wars) had caused the law to be enacted. At a later period, the right to ask legal redress was also extended to a mere violation of the honor of a person; and, in the laws of modern nations, this has been retained, though with a great variety of views. In the middle ages, the duel was authorized by law; and, when the laws took from individuals the right of redressing their own wrongs, it was deemed necessary to offer some other mode of redressing injuries to honor, which had been one of the most fruitful sources of duels. The common law of England punishes injuries to honor only when they amount to malicious attempts to blacken a man's reputation (see *Libel*, and *Slander*); but according to the Prussian code, a person may be sued for having used insulting language, or even insulting gestures, on the mere ground of violation of honor, and not of any other damage inflicted thereby. But, of late, the right has been considerably restricted; for instance, the complaint must be entered within a short period fixed by law, &c. According to the laws of the German states, the petition of the complainant may be to have the *amende honorable* made him, as by an apology for the insult, &c., or to have the offender punished. Legislation and adjudication on injuries to honor are matters of much delicacy, beyond the limits of the English law, which makes reparation only in cases where the offence has produced, or is directly calculated to produce injury, to a man, in his character or business.

INK, WRITING. This material can be prepared of various colors, but black is the most common. Doctor Lewis gives the following receipt:—In three pints of white wine, or vinegar, let three ounces of gall-nuts, one ounce powdered logwood and one ounce green vitriol be steeped half an hour; then add $1\frac{1}{2}$ ounce gum Arabic, and, when the gum is dissolved, pass the whole mixture through a hair-sieve. Van Mons recommended the following preparation:—Let four ounces gall-nuts, $2\frac{1}{2}$ ounces sulphate of iron, calcined to whiteness, and two pints water, stand in a cool place 24 hours; then add $1\frac{1}{2}$ ounce gum Arabic, and keep it in a vessel open, or slightly stopped with paper. Another recipe is this:—Take one pound gall-nuts, six ounces gum Arabic, six ounces sulphate of iron, and four pints beer, or water; the gall-nuts are broken, and stand as an infusion 24 hours; then coarsely-pounded gum is added, and suffered to dissolve; lastly, a quantity of vitriol is introduced, and the whole passed through a hair-sieve. It is generally observed, that unboiled inks are less likely to fade than others. A good red ink is obtained as follows:—A quarter of a pound of the best logwood is boiled with an ounce of powdered alum and the same quantity of cream of tartar, with half the quantity of water, and, while the preparation is still warm, sugar and good gum Arabic, of each one ounce, are dissolved in it. Solutions of indigo with pieces of alumina, and mixed with gum, form a blue ink. Green ink is obtained from verdigris, distilled with vinegar and mixed with a little gum. Saffron, alum, and gum water, form a yellow.—It is not well ascertained how soon the present kind of writing ink came into use. It has certainly been employed for many centuries in most European countries; but the ancient Roman inks were, for the most part, of a totally different composition, being made of some vegetable carbonaceous matter, like lamp-black, diffused in a liquor. The Chinese, and many of the inks used by the Oriental nations, are still of this kind. Sometimes the ink of very old writings is so much faded by time as to be illegible. Doctor Blagden (*Philosophical Transactions*, vol. 77), in his experiments on this subject, found that, in most of these, the color might be restored, or, rather, a new body of color given, by penciling them over with a solution of prussiate of potash, and then with a dilute acid, either sulphuric or muriatic; or else, *vice versa*, first with the acid, and then with the prussiate. The acid dissolves the oxide

of iron of the faded ink, and the prussiate precipitates it again of a blue color, which restores the legibility of the writing. If this be done neatly, and blotting paper laid over the letters as fast as they become visible, their form will be retained very distinctly. Pencilling over the letters with an infusion of galls also restores the blackness, to a certain degree, but not so speedily, nor so completely.

China or Indian Ink. The well known and much admired Indian, or China ink, is brought over in small oblong cakes, which readily become diffused in water by rubbing, and the blackness remains suspended in it for a considerable time, owing to the extreme subtilty of division of the substance that gives the color, and the intimacy with which it is united to the mucilaginous matter that keeps it suspended. Indian ink does, however, deposit the whole of its color by standing, when it is diffused in a considerable quantity of water. Doctor Lewis, on examining this substance, found that the ink consisted of a black sediment, totally insoluble in water, which appeared to be of the nature of the finest lamp-black, and of another substance soluble in water, and which putrefied by keeping, and, when evaporated, left a tenacious jelly, exactly like glue, or isinglass. It appears probable, therefore, that it consists of nothing more than these two ingredients, and probably may be imitated with perfect accuracy by using a very fine jelly, like isinglass, or size, and the finest lamp-black, and incorporating them thoroughly. The finest lamp-black known is made from ivory shavings, and thence called *ivory black*.

Printers' Ink. This is a very singular composition, partaking much of the nature of an oil varnish, but differing from it in the quality of adhering firmly to moistened paper, and in being, to a considerable degree, soluble in soap-water. It is, when used by the printers, of the consistence of rather thin jelly, so that it may be smeared over the types readily and thinly, when applied by leather cushions; and it dries very speedily on the paper, without running through to the other side, or passing the limits of the letter. It is made of nut-oil, boiled, and afterwards mixed with lamp-black, of which about two ounces and a half are sufficient for 16 ounces of the prepared oil. Other additions are made by ink-makers, of which the most important is generally understood to be a little fine indigo in powder, to improve the beauty of the color. Red printers' ink is made by adding to the varnish

about half its weight of vermilion. A little carmine also improves the color. (*Encyclopédie, Arts et Métiers*, vol. iii, page 518.)

Colored Inks. Few of these are used, except red ink. The preparation of these is very simple, consisting either of decoctions of the different coloring or dyeing materials in water, and thickened with gum Arabic, or of colored metallic oxides, or insoluble powders, merely diffused in gum-water. The proportion of gum Arabic to be used may be the same as for black writing ink. All that applies to the fixed or fugitive nature of the several articles used in dyeing, may be applied, in general, to the use of the same substance as inks. Most of the common water-color cakes, diffused in water, will make sufficiently good colored inks for most purposes.

Sympathetic Inks; liquids without any observable color; any thing may be written with them invisibly, and made visible at will by certain means. Even Ovid informed maidens who were closely watched, that they might write to their lovers whatever they pleased with fresh milk, and when dry sprinkle over it coal-dust, or soot. In modern times, chemistry has taught the preparation of many improved inks of this nature:—Form a solution of green vitriol in water, and add a little alum, to prevent the yellow iron precipitate from sinking, which always rises in case the acid does not prevail; this solution forms a sympathetic ink, which appears extremely black when it is moistened with a saturated infusion of gall-nuts. A sympathetic ink may likewise be formed from common black ink. For this purpose, the color must be destroyed by a mixture of nitric acid. Any thing written with it becomes visible on moistening it with a solution of some volatile alkali. The famous ink, invisible in the cold, and visible at a moderate temperature, may be prepared without much difficulty. (See *Cobalt*.) Any writing with this ink is invisible; but, on the application of a certain degree of heat, it becomes a beautiful greenish blue. As soon as it cools again, the color vanishes; and thus, by alternately heating and cooling it, the writing can be made visible or invisible. Care must be taken not to heat it more than is required to make it plain, for otherwise it always continues visible. With this sympathetic ink landscapes may be drawn, in which the trees and the earth lose their verdant appearance in the winter, but may be changed again into a spring landscape, at will, by exposing them to a

gentle heat. This has been already tried on screens.

INLAND NAVIGATION.—*American Canals.* An account of canals, except those of America, is given under the article *Canals*. An account of river navigation will be found under the article *Rivers, navigable*. In the present article, a view will be given of American canal navigation, as it presents itself in 1831; beginning at the northerly part of the continent, and proceeding southerly. It is difficult to obtain exact information relating to the works of this description in America. The publications on the subject contain immense masses of matter, of very little interest or practical utility, and, at the same time, omit a definite description of the works themselves, and give a very imperfect account of the obstacles overcome in their construction, or the amount of business done upon them. Some of the works mentioned in the following list, as will be seen in the account of them, are merely projected, and others are not yet completed; and it is not easy, at the time of making this article, to ascertain, precisely, what degree of progress has been made in some of them; nor is it very important to do so, since the state of things is rapidly changing in this respect; inasmuch, that what would be an exact account of some of them at the time of making this article, would cease to be such at the time of its publication.

CANALS OF CANADA.—*Welland canal* was constructed from 1824 to 1829. Its length is 4½ miles; its breadth at the surface 58 feet, at the bottom 26 feet, and its depth 8 feet. This line of navigation passes from the mouth of Ouse river, on lake Erie, north-eastward, to strike at a point of the Welland or Chippeway river; and, taking the course of that river downwards, 11 miles, proceeds from thence northward, across the mountain ridge, and down to the mouth of Twelve-Mile creek, on lake Ontario. The distance from lake to lake is 43 miles. The deepest cutting, near the summit, is 56 feet. It has 35 locks, 125 to 100 feet long, 32 to 22 feet wide. The capital stock of the company is 200,000 pounds; the number of shares, 16,000. This canal admits of sloop navigation, and opens a communication between lake Erie and lake Ontario, in the same vessels which navigate those lakes, and saves discharging and reloading cargoes. One of the purposes of its construction was, to prevent the trade of that part of Upper Canada which communicates with the great western lakes, from

being diverted to New York, by the route of the Erie canal. It was an arduous and stupendous work, as appears sufficiently from the dimensions and length of the canal. Its execution was, however, facilitated by taking advantage of natural channels of slack-water.—*Rideau canal* is a projected navigation for 122 miles, from Hull, on the great Ottawa, by the course of the river Rideau and a chain of lakes, to the Gannanoqui, on the St. Lawrence, at the Kingston mills, five miles from the city of Kingston. The plan of communication is calculated for sloop navigation. The expense, it is supposed, may amount to £1,000,000.—*La Chine canal* is 10 miles in length, from Montreal, on the St. Lawrence, directly to Upper La Chine, on lake St. Louis, cutting off a bend in the river, and avoiding the rapids of St. Louis. Cost, £220,000; for sloop navigation.—*L'Isle Perrault canal* is a projected work of five miles in length, from St. Louis lake, at the foot of St. Anne's rapids, to the head thereof, by a canal passing either at the back of St. Anne's, or else across the Isle Perrault.—*Grenville canal* is a projected work of 12 miles in length, from the head of Long Sault or Ottawa falls, at the village of Grenville, by a lateral canal, to the foot of Carillon rapids, opposite Point Fortune; for sloop navigation. Estimated cost, £250,000.—*La Petite Nation canal* is a projected artificial channel of navigation, of 50 miles in length, from the foot of Carillon rapids, at Hawkesbury, on the Ottawa, across the peninsula, to the St. Lawrence, at Prescott.

CANALS OF THE UNITED STATES. Immense improvements have been made in inland navigation, both by rivers and canals, during the 15 years from 1816 to 1831. More than 1000 miles of canal have been made during that time, besides vast improvements in river navigation; and, in 1831, the numerous works of this sort, already commenced, are prosecuted with unremitting activity. Only a very general outline of these improvements, so important, both in a political and economical view, can be given in this work.

Canals in New England.—*Cumberland and Oxford canal.* This navigation, partly natural and partly artificial, extends about 50 miles, from Portland to Sebago pond, in Maine. The head of the canal is in the town of Bridgeton, at the termination of Long pond, which is 10 miles in length. This pond, together with Brandy pond and Sebago pond, with their outlets, constitutes 27 miles of the ca-

nal; 24 locks only are necessary. Tolls are, per mile, for planks, 6 cents per 1000 feet; shingles, 2 cents a thousand; wood, 6 cents a cord, per mile; timber, 6 cents a ton, per mile; goods in boats, 6 cents a ton; boats, rafts, &c., 6 cents additional for each lock.—*Middlesex canal* was completed in 1808. It opens a communication between Boston harbor and the Merrimack river, a distance of 27 miles. It has but one summit level, 104 feet above Boston harbor, and 32 above the level of the Merrimack, at the place of its junction with that river in Chelmsford, above Pawtucket falls; on which falls are situated the great manufacturing establishments of Lowell. Its breadth at the surface is 30 feet, at the bottom 20 feet, and its depth of water 3 feet. It makes part of a line of water communication between Boston and the central part of New Hampshire. There are on this canal 20 locks of different lifts, of which the highest is 12 feet. The locks are 75 feet long in the clear, 10 feet wide at the bottom, and 11 feet at the top. The number of aqueducts, over rivers and streams, is 7; and there are 50 bridges, having stone abutments 20 feet apart. Cost, \$528,000; constructed by the Middlesex canal company, incorporated in 1789. The tolls, in 1824, were, for boats, \$14,184; rafts, \$5770; in the whole, \$19,954.—*Bow canal* was made in 1812, and is the continuation of a line of navigation, of which the Middlesex canal constitutes a part. Its length is $\frac{1}{2}$ mile; the lockage 25 feet. Its dimensions, and the size of the locks, correspond to those of the Middlesex canal, being designed to pass the same boats. It passes a fall in the Merrimack of 25 feet, with 4 locks. A dam is constructed across the river, at the head of the falls. Expense of the whole work, \$19,000.—*Hooksett canal*, another work on the Merrimack, 50 rods in length, is also a part of the same line of navigation, and passes Hooksett falls, in that river, by a lockage of 16 feet. These falls are lower down the river than the Bow canal. It has three locks. Cost of the whole works, \$13,000.—*Amoskeag canal*, one mile in length, is another part of the same navigation, being eight miles farther down the Merrimack, at Amoskeag falls, which are passed by this canal with a lockage of 45 feet. It has 9 locks, and several dams. Cost, \$60,000.—*Union canal*, a part of the same navigation, having 7 locks in 9 miles, is immediately below the Amoskeag canal, and comprehends 6 sets of falls. Cost, \$35,000. Cromwell's falls, which are below, on the same river,

are locked at an expense of \$9000; and 15 miles lower down are the Wiccassee falls, which have been locked at an expense of about \$12,000. The line of navigation above described, commenced at a very early period in the history of canal navigation in the U. States; and the undertaking evinced great public spirit and enterprise on the part of the persons who engaged in it, whose inadequate pecuniary remuneration has, however, operated as a discouragement from similar enterprises in New England.—*Pawtucket canal*, a branch of the navigation above described, is a channel of about a mile and a half in length, passing Pawtucket falls on the Merrimack, and facilitating the navigation of that river from Chelmsford, where the Middlesex canal meets the river, to Newburyport, situated near its mouth. It is in the town of Lowell. A dam is made across the Merrimack, above those falls, a short distance below the termination of the Middlesex canal, for the purpose of regulating the height of water for supplying the Pawtucket canal, which was originally made merely for the passage of rafts and boats, and corresponded in dimensions to the other works on the same river above, and to the Middlesex canal. About the year 1820, the proprietors of the manufacturing establishments, which have, during the short subsequent period of about 10 years, grown to so surprising a magnitude, and which are still rapidly increasing, purchased the Pawtucket canal, and enlarged its channel to the dimensions of 90 feet in breadth, and 4 in depth, which not only serves for the original purpose of this canal, in passing these falls, which are in the whole about 32 feet in height, but also supplies immense hydraulic works, used for the purposes of manufacturing.—*Farmington canal* was commenced in 1825, upon the plan of connecting, by a line of 78 miles of entirely artificial navigation, Connecticut river at Northampton, in Massachusetts, with New Haven harbor. It is 36 feet in breadth at the surface of the water, 20 at the bottom, and 4 feet in depth; and passes from New Haven to Farmington, in Connecticut, and from thence to Colebrook. The locks are 80 feet in the clear, and 12 feet wide. Its commencement at New Haven is from a basin of 20 acres capacity. It is (in 1831) nearly completed, and wholly under contract, from New Haven to Southwick ponds, in Massachusetts, a distance, by survey, of 58 miles; lockage, 218 ft.—*Hampshire and Hampden canal* is a projected

work, of 20 miles in length, in Massachusetts, in continuation of the Farmington canal, from Southwick ponds to Northampton; lockage, 298 feet.—*Enfield canal*, and the three others next mentioned, are short cuts at the different falls on Connecticut river. This was the latest of these improvements, having been commenced by a company, under a charter granted in 1824. It is $5\frac{1}{2}$ miles in length, and passes the Enfield falls, in the state of Connecticut. It has three stone locks, each 10 feet lift, 90 feet by 20. This canal adds 40 miles to the steamboat navigation up the Connecticut. Before the construction of this work, these rapids were navigated by the boats passing along the river, but they were a great impediment to the navigation. This canal, like the Pawtucket at Lowell, on the Merrimack, is intended both to facilitate navigation and supply hydraulic works. It is an important improvement, and does great credit to the undertakers.—*South Hadley canal*, the next artificial channel of navigation up the Connecticut, is in South Hadley, in Massachusetts. It is 2 miles in length, and overcomes the rapids in the Connecticut at the place, amounting to about 40 feet. There is a cut in this canal, 40 feet deep, 300 feet long, in solid rock. This improvement, and also the one next mentioned, were undertaken by a company which was chartered in 1792.—*Montague canal*, in the town of Montague, also in Massachusetts, is the next in order, higher up the Connecticut. It is 3 miles in length, 25 feet broad and 3 deep. By this canal the navigation passes the Montague falls, which commence above Miller's river; it terminates above the mouth of Deerfield river; lockage, 75 feet.—*Bellows Falls canal* is a short artificial channel, higher up the Connecticut, in the state of Vermont, for the purpose of passing Bellows falls.—*Blackstone canal* (see that article for a description of this canal). A few miles above Providence harbor, this canal meets the Blackstone or Pawtucket river, and passes up along its western bank a great part of its route, and is wholly supplied by the waters of this river and its tributary streams and ponds, some of the latter being made use of as extensive reservoirs, whereby, in the dry season, all the water used by the canal, and so taken away from the various manufacturing works established at the different falls on the river, is replaced, and supposed, indeed, to be more than compensated for. This canal facilitates and greatly increases the trade from the

northern part of the state of Rhode Island, and the interior central part of Massachusetts, to the market of Providence, that of New York, and the ports of the Middle and Southern States.

New York Canals. The state of New York has an extensive system of artificial inland navigation, connecting the navigation of Hudson river with that of lake Champlain, lake Ontario, lake Erie, and Delaware river.—*Champlain canal* is $63\frac{1}{2}$ miles in length, 40 feet wide at the surface, 28 feet at the bottom, and 4 feet in depth. This, and the Erie, Oswego and Cayuga canals, were made by the state, at the public expense, and remain under the administration of the government, as public property. The Champlain canal passes from Albany to Whitehall, on lake Champlain, connecting Hudson river with that lake. This canal commences at Whitehall, at the head of sloop navigation on lake Champlain, and, immediately rising, by 3 locks, 26 feet, proceeds on a level $5\frac{1}{2}$ miles up the valley of Wood creek, enters that stream, and follows its channel for 3 miles, to a lock of 4 feet lift, which extends the navigation up the creek $3\frac{1}{2}$ miles farther, to Fort Anne village, where, after rising by 3 locks 24 feet, it leaves the creek, and proceeds 12 miles on a summit level, through the towns of Fort Anne and Kingsbury, to Fort Edward. Here it receives the waters of the Hudson, above the great dam in that river, by a feeder of half a mile in length, and soon after descends 30 feet by 3 locks, into the Hudson, below the dam. The great dam is 900 feet long, 27 feet high, and throws back an ample supply of water for the summit level. From Fort Edward, the navigation is continued, for the present, down the channel of the Hudson, 8 miles, to the head of Fort Miller falls; around which it is carried by a canal on the east bank of the river, half a mile long, and having 2 locks of 18 feet descent. From Fort Miller, the river is made navigable for near three miles farther, by a dam at the head of Saratoga falls, just above which the canal leaves the river on the western side, and proceeds on a level for 17 miles, through Saratoga and Stillwater, Schuyler's flats, and over Fish creek, by an aqueduct, to a point two miles below Stillwater village. From this point to Waterford, where the canal enters the Mohawk, and meets the Erie canal, a distance of 9 miles, it descends 86 feet by 9 locks, 6 of which are in the town of Waterford. From Waterford, the Hudson is now made naviga-

ble for sloops to Troy, $3\frac{1}{2}$ miles below, by a dam across the river at the latter place, 1100 feet in length, 9 feet high, and having a sloop lock, at its eastern extremity, 114 feet long, 30 feet wide, 9 feet lift. The cost of this lock and dam was \$92,270.—*Erie canal*, extending from Albany on the Hudson, to Buffalo on lake Erie, is 363 miles in length, 40 feet wide at the surface of the water, 28 feet at the bottom, with a depth of 4 feet of water. It has 2 summit levels in this distance, and the whole lockage is 692 feet. It was completed in 1825. The locks are 83 in number, all of stone masonry, each 90 feet long in the clear, and 15 feet wide. From Buffalo, the canal proceeds 10 miles to Tonnewanta creek. The Tonnewanta is then used for 12 miles; thence by a deep cut $7\frac{1}{2}$ miles to Lockport, where it descends 60 feet by 5 locks; thence on a uniform level 63 miles to Rochester, where it crosses the Genesee, by an aqueduct of 9 arches, each 50 feet span. Here it is supplied by a navigable feeder, 2 miles long, connecting it with the Genesee; thence easterly to Montezuma, $67\frac{1}{2}$ miles, in which distance it descends 126 feet, and crosses Mud creek twice by aqueducts. At Montezuma, the level of the canal ascends, and, in a distance of 27 miles, to Salina, rises 67 feet. In Salina commences the 'long level,' a distance of 69 miles, to Frankfort. From Frankfort, the canal descends, in 12 miles, 49 feet, to the head of Little Falls, where are 5 locks, and an aqueduct over the Mohawk, of 3 arches. From the foot of Little Falls, the canal continues for 70 miles down the valley of the Mohawk, on the south side of the river, to Niskayuna, 4 miles below Schenectady, where it crosses the Mohawk by an aqueduct 748 feet long. The descent from the foot of Little Falls to Niskayuna is 86 feet. After crossing the Mohawk, the canal proceeds along the north bank thereof for 12 miles, and then recrosses by an aqueduct 1188 feet long, and passes by the Cohoes falls, where, in the space of 2 miles, it descends 132 feet, by 16 locks. A little below the Cohoes falls, a feeder enters from the Mohawk, and connects the Erie with the Champlain canal; and the united work then proceeds to Albany, $8\frac{1}{2}$ miles, in which distance it descends 44 feet, and terminates in the tide waters of the Hudson. Cost, \$7,602,000.—*Oswego canal* is a branch of the Erie. This navigation passes from Oswego to Syracuse, connecting lake Ontario with the Erie canal. It has 123 feet of lockage, all de-

scending towards lake Ontario. One half of the distance, is a canal connected with Oswego river by locks and dams; the other half is a slack-water navigation on the river. Its structures consist of 22 bridges, 1 aqueduct, 7 culverts, 2 waste weirs, 8 dams across the river, 13 locks of stone, and 1 of stone and timber. Cost, \$525,115. It has been made since the Erie canal.—*Cayuga and Seneca canal*, another branch of the Erie, made in 1828, extends from Geneva to Montezuma, connecting Seneca and Cayuga lakes with the Erie canal. The work consists of 10 miles of independent canal, and 10 miles 24 chains of slack-water navigation. There are 7 locks, embracing $73\frac{1}{2}$ feet of lockage, 19 bridges, 5 safety-gates, 5 dams, and 6 culverts. Cost, \$211,000.—*Delaware and Hudson canal* is not, like the preceding, a work of the state, having been made by a private company. It is 64 miles in length, 32 feet wide at the water's surface, 20 feet at the bottom, 4 feet in depth, and has 615 feet of lockage. It commences on the western side of the river Delaware, at Carpenter's point, and passes across to the Hudson, which it enters 4 miles below Kingston, and thus connects those two rivers. It also unites, in Pennsylvania, with the Lackawaxen canal. These canals, when united, extend 117 miles. Length from the tide water of the Rondout, to the summit level between the Hudson and Delaware, 38 miles, with a rise of 535 feet. From the summit level to the Delaware, is 26 miles, and a descent of 80 feet. Up the Delaware to the mouth of the Lackawaxen, is 17 miles, and a rise of 148 feet. Up the Lackawaxen to head water, at Kean's pond, is 36 miles, and a rise of 668 feet. Total lockage, 1431 feet. Cost, \$16,000 per mile. The Delaware and Hudson canal company were incorporated in 1823. Tolls not to exceed 8 cents per mile per ton of coal, and 4 cents for other merchandise; the same for every 100 feet, cubic measure, of timber, and every 1000 feet boards, and every 5000 shingles.

New Jersey.—*Morris canal* was commenced in 1825, and is (1831) much advanced. It is 101 miles in length, from 30 to 32 feet wide at the surface, 16 to 18 feet at the bottom, and 4 feet in depth; the whole lockage is 1657 feet. It extends from Jersey city, on the Hudson, across the state of New Jersey, to the Delaware, opposite Easton, where it connects with the Lehigh canal. The summit level is near lake Hopatcong. On the western division, from the feeder at the summit level

to the Delaware, are to be seven locks, overcoming a difference in level of 67 feet, and 11 inclined planes, overcoming 691 feet. On the eastern division, between the summit level and the Passaic, there are to be 17 locks, overcoming a difference of 156 feet, and 12 inclined planes, overcoming 743 feet. There will be, within these limits, 4 guard-locks, 5 dams, 30 culverts, 12 aqueducts, 200 bridges and upwards. The aqueduct across the Passaic, at Little Falls, is of cut stone, the duct resting on a single arch of 80 feet, with 50 feet radius, and measuring 52 feet perpendicular above the water level, that is, to the coping of the side-walls; extent, from wing-wall to wing-wall, 215 feet.—*Delaware and Raritan canal* is a projected work in the same state.

Pennsylvania Canals. The state of Pennsylvania has a very extensive system of canal navigation, a very large part of which has been undertaken by the state, at the public expense.—*Schuylkill canal and navigation* was commenced in 1816, and has been in operation a number of years. Its length is 110 miles; lockage, 620 feet, or only 5.64 feet per mile; is 36 feet wide at the surface of the water, 24 feet at the bottom, and 4 feet deep, and extends from Philadelphia to Reading, and from thence to mount Carbon. It is sometimes called the *Schuylkill navigation*. It comprises 31 dams, commencing at Fair Mount water-works, near Philadelphia, by which is produced a slack-water navigation of 45 miles; also 23 canals, extending 65 miles; 125 locks, 17 feet wide, 80 feet long, of which 28 are guard-locks. There are 17 arched aqueducts; a tunnel of 450 feet, cut through and under solid rock; 65 toll and gate-houses. The dams vary from 3 to 27 feet in height. Total cost of the improvements, January 1, 1830, \$2,236,937. Tolls, for 1826, \$43,109; 1827, \$58,149; 1828, \$87,171; 1829, \$120,039. It was constructed by the Schuylkill navigation company, incorporated in 1815. The company may declare a dividend not exceeding 25 per cent. per annum, and the tolls are to be regulated accordingly.—*Union canal and navigation*, constructed in 1827; length, 82 miles, exclusive of a navigation of $7\frac{1}{2}$ miles; lockage, 520 feet; 36 feet wide at the surface, and 24 feet at the bottom, and 4 feet deep. It extends from 4 miles below Reading to Middletown, connecting the Susquehanna and Schuylkill rivers, and uniting at Reading with the Schuylkill canal, and at Middletown with the great Pennsylvania canal; the summit level is at Lebanon. The canal begins, at its eastern end, in the Schuyl-

kill works, and ascends along the western bank of the Schuylkill to the valley of the Tulpehocken, and passes up that valley to the east end of the summit level, within five miles of Lebanon, rising 311 feet by 54 locks, of various lifts of from 8 to 4 feet. The summit extends 6 miles, 78 chains, part whereof is a tunnel of 850 feet, 18 feet wide, 14 high, opening into Clark's creek valley, along which the canal descends to the Swatara, and, continuing along the valley of this river, terminates at Middletown. Descent from summit, 208 $\frac{1}{2}$ feet, overcome by 39 locks. It has 43 waste weirs, 49 culverts, 135 road and farm bridges, 12 aqueducts, one of which is 276 feet in length. On this canal are extensive water-works for raising the water of the Swatara to the summit. Cost, \$20,000 per mile. Rates of toll to be regulated so as not to give more than 12 per cent.—*Lackawaxen canal* is 36 miles in length, 32 feet wide at the surface, 20 feet at the bottom, and 4 feet in depth. It commences at the termination of the Delaware and Hudson canal, near Carpenter's point, and unites with a rail-road at Honesdale. (See *Delaware and Hudson canal*.) In 1825, the Lackawaxen canal and coal company were authorized to act in union with the Delaware and Hudson canal company. The tolls are not to exceed $1\frac{1}{2}$ cents per ton per mile on boats transporting stone, coal, &c. Great quantities of Lackawana coal are transported along this canal.—*Lehigh canal and navigation* was completed about 1829, is 46 $\frac{3}{4}$ miles in length, 60 to 65 feet wide at the surface, 45 feet at the bottom, and 5 feet deep; the lockage is 360 feet. It extends from Easton on the Delaware to Stoddartsville, connecting the Morris canal with the Mauch Chunk rail-road; cost, \$1,558,000. It consists of 37 miles of canal, and 9 $\frac{1}{4}$ of slack-water pools. The ponds connecting the several lengths of canal are all cleared out in the channel to the width of 50 feet. The canals are furnished with 43 locks, from 6 feet lift to 9, whereof 2 are guard-locks, besides 5 other guard-locks at the pools respectively; dimensions, 22 feet wide, 100 feet long. There are 8 dams, varying in height from 6 to 16 feet. The lock walls are constructed of rough stone. There are 4 aqueducts; 22 culverts; cost, \$25,000 per mile. The Lehigh coal and navigation company were incorporated in 1818. Tolls not to exceed three cents per mile, per ton, for boats, and every ton of shingles in rafts, from the Great Falls to the mouth of Nescoconing creek; and from thence to the mouth of the Lehigh, one cent per

mile; and the same toll is paid for 1000 feet boards.—*Conestoga navigation*, 18 miles in length, with a lockage of 70 feet, passes from Safe Harbor, on Susquehanna river, at the mouth of Conestoga creek, up the course of the creek, to Lancaster. The navigation is effected by a series of locks and dams, the pools never affording less than 4 feet depth of water; the locks are 100 feet by 22, in the chambers; the towing-path is on the south side of the river. Cost, \$4,000 per mile. The company were incorporated in 1825; they are authorized to receive to the amount of 15 per cent. on the sum expended, and the legislature may regulate the rate of tolls, provided they do not reduce them below that rate.—*Conewago canal* is 2½ miles in length, with a lockage of 21 feet, and passes from the foot to the head of Conewago falls, west side of Susquehanna river, York county, Pennsylvania; and the same, east side, Dauphin county. Two dams, one of 800, the other of 500 feet, are connected with the works. There are 1 guard and 3 lift locks, each 110 feet long, by 18 wide.—*Pennsylvania canal* was commenced in 1826, by the state of Pennsylvania, and great progress has been made in constructing the different branches, and the work is now (1831) prosecuted with great activity. It includes a number of canals, running in different directions, and known by different names: it consists of five divisions:—1. The transverse division commences at Columbia, where the Philadelphia and Columbia rail-road terminates, and runs on the Susquehanna to Duncan's island, $44\frac{3}{10}$ miles, at the mouth of the Juniata, thence on the Juniata to Huntington, 89 miles; thence from Huntington to near Holidaysburg, 39 miles. The division of rail-way proposed from Holidaysburg to the head of the basin at Johnstown, is 37 miles; this road crosses the Alleghany, and at its lowest crossing-place is 1364 feet 7 inches above the basin at Holidaysburg, and 1141 above that of Johnstown. The canal then runs from Johnstown to Pittsburg, 104½ miles, down the Kiskiminitas and Alleghany. 2. The middle division is from the mouth of the Juniata up the Susquehanna to the boundary line of New York, 204 miles. 3. The West Branch division, from Northumberland, by canal, up the West Branch valley, on the east side of that river, to a dam above the mouth of the Bald Eagle creek, and thence, across the small peninsula there formed, to a dam on the Bald Eagle, near Dunnstown. Ascent, by 14 locks, 101 feet; distance, 68½ miles. 4. The eastern

division is in the valley of the Delaware commencing at Bristol, 18 miles above Philadelphia, and running to Easton, 60 miles. From Easton it is to be continued, under the name of the *Delaware canal*, to meet the Delaware and Hudson canal, at Carpenter's point, 66½ miles. Begun in 1827. 5. The western, or Ohio and lake Erie division, is to extend from the mouth of the Kiskiminitas up the Alleghany and French creeks, and thence to the town of Erie, uniting the Ohio and lake Erie, 213 miles.—*French creek feeder* runs from Bemis's mill, on French creek, along the eastern side, nine miles, down to a point opposite the Conneaught outlet, and thence passing across by an aqueduct westward 12½ miles, to Conneaught lake, 21½ miles.

Delaware and Maryland.—*Chesapeake and Delaware canal* was commenced in 1824, and opened for navigation in 1829. It is 13½ miles long, 66 feet wide at the surface of the water, and 10 feet deep, being intended for sloop navigation between the river Delaware and Chesapeake bay. It leaves the Delaware 45 miles below Philadelphia, and passes across the peninsula to the Chesapeake. This canal has two tide and two lift locks, of 100 feet in length by 22 in breadth, within the chamber; it is navigable for vessels usually employed in the bay and coasting trade. At the eastern termination of the canal, at Delaware city, a harbor extends 500 feet along the shore, from which two piers, that distance apart, project 250 feet into the river, nearly opposite to Fort Delaware. Between the harbor and the canal, the Delaware tide-lock opens the communication. In this canal is a deep cut of 3¾ miles, 76½ feet in depth, at the place where the greatest excavation was made. The summit level is 12 feet above tide water.—*Port Deposit canal* is a public work of the state of Maryland, of 10 miles in length, from Port Deposit, on the east bank of the Susquehanna, along a line of rapids northward to the boundary line of Maryland and Pennsylvania.—*Potomac river canals.* At Little, or Lower Falls, three miles above Washington, is a canal 2½ miles long; difference of level, 37 feet 1 inch, overcome by a series of 4 sets of locks, of solid masonry, 80 feet long, 12 wide. At Great Falls, nine miles above, is a canal 1200 yards long, lined with walls of stone; difference of level, 76 feet 9 inches, surmounted by 5 sets of locks, of solid masonry, 100 feet long, 10 to 14 wide; lifts from 10 to 18 feet. Both here and at Little Falls, the canal dimensions are 25 feet wide at surface, 20 at bottom, 4 feet deep. Canal

works, on a smaller scale, are constructed at Seneca falls, Shenandoah falls, House's falls. These works were executed by the Potomac company, incorporated, in 1784, by Maryland and Virginia; but they are to be surrendered to the Chesapeake and Ohio canal company.—*Chesapeake and Ohio canal*, commenced in 1828. The proposed length is 341½ miles; the breadth, at the surface of the water, 60 to 80 feet; at the bottom, 50 feet; the depth of water, 6 to 7 feet. According to the plan of this canal, it will pass from tide-water of the Potomac river above Georgetown, in the District of Columbia, and terminate near Pittsburg, in Pennsylvania. The first 2 miles of this canal above Georgetown are 70 feet wide on the surface, and 7 feet deep; the next 2 miles are 80 feet wide, 6 feet deep. Five miles from Georgetown, the canal is so planned that a branch may be constructed to Alexandria, another to Baltimore, and another to the navy-yard in Washington. The remaining distance to the Point of Rocks (44 miles), is to be 60 feet wide, 6 deep. The locks are to be of stone, 100 feet by 15 feet in the clear. The eastern section of this canal, from one mile below Cumberland to tide-water at Georgetown, is 186 miles 1353 yards; descent, 638 feet. The middle section is from Cumberland to the mouth of Casselman's river, 70 miles 1010 yards; this section includes the summit level, where a tunnel, 4 miles 80 yards long, passing under a ridge of the Allegheny of 856 feet elevation, is necessary, with a deep cut of 1060 yards long at the western end, and another deep cut of 140 yards at the eastern end,—each of these cuts opening into a basin, of 880 yards in length and 64 in width. Length of summit level is 5 miles 1280 yards; lockage of the whole middle section is 1961 feet. The western section is from the mouth of Casselman's river to Pittsburg, 85 miles 348 yards, embracing a descent of 619 feet; lockage on the whole canal, 3215 feet. The first estimate of the cost was \$22,375,000, but it is maintained that the cost will not exceed \$10,000,000. The U. States have authorized a subscription of 1,000,000 dollars to the stock of this company. To be constructed by the Chesapeake and Ohio canal company. Charter granted by Virginia in 1824, confirmed by Maryland and congress in 1825. Tolls not to exceed 15 per cent. dividend.

Ohio. The state of Ohio has commenced the construction of canals, as public works, on a very liberal scale.—*Ohio State canal*, from Cleveland, on lake Erie, to the Ohio, at the mouth of the

Scioto; lockage, 1185 feet; length of the main line is 306 miles; feeders, 15 miles; total, 322 miles. Estimated expenses, \$2,801,000. The route is from Portsmouth, on the Ohio (where it is 474 feet above tide level, and 94 below lake Erie), up the valley of the Scioto, to Pikestown; thence crossing the river to near Chillicothe; thence again crossing the river, it continues along the eastern bank to the Big Belly creek, where it receives a feeder, 10 miles long, from the Scioto at Columbus; it then passes up the valley of Walnut creek to the Licking and Walnut creek summit, between the head waters of those streams. From the summit it continues down the valley of Licking creek to Rocky Fork, and thence across the valley to the Tomaka, and down it to near its junction with the Muskingum. From this point the ascent commences, and the line passes up the Muskingum valley to White Woman's creek; crossing this, it proceeds up the valley of the Tuscarawas Fork, first on the western, then on the eastern bank, to a point where its two head waters unite near the south-west angle of Portage county. This is the centre of the Portage summit, extending 10 miles. From the north of the Portage or Akron summit (499 feet above the Ohio at Portsmouth, 973 feet above the Atlantic, 405 above lake Erie), it passes down the Cuyahoga valley, first on the west, afterward on the east side of the river, to within 6 miles of the mouth at Cleveland, for which 6 miles the river channel with a towing-path is to be used.—*Miami canal*, 40 feet wide at the surface, and 4 feet in depth, from Cincinnati on the Ohio to the Maumee, near the head of lake Erie, was commenced in 1825. Length of main line, 265 miles; feeders, 25 miles; total, 290; lockage, 889; estimated expense, \$2,929,957. The entire line from Cincinnati to Dayton is (1831) completed. This division embraces 22 locks; ascent from the Ohio, at low water, 108 feet; length of canal, 65; feeders, 2; total, 67 miles; cost, \$746,852. From Dayton the line is to be extended to lake Erie. The summit level, commencing 18 miles north of Dayton, extends 60 miles within a single lock; and this level, together with 75 miles of the line north of it, must receive all its waters from feeders from the Mad and Miami rivers. To aid the state in extending this canal to lake Erie, there is assigned by congress, of the public lands which the same shall pass through, a quantity equal to one half of five sections in width, on each side of the canal, between Dayton and the Mau-

mee river, at the mouth of the Auglaise, the U. States reserving each alternate section; provided this extension be commenced within five years from May, 1828, and finished within twenty; the canal to be a highway for the U. States, free from toll.

Virginia and North Carolina.—Appomattox river canals. These canals are for the purpose of improving the navigation of the Upper and Lower Appomattox.—*James river canals.* The river is navigable, for vessels of 125 tons burthen, to a little below Richmond. At the city, there are 12 locks, overcoming an ascent of 80 feet, and connecting the tide water with a basin on Shockoe hill. From this basin proceeds a canal, 25 feet wide, 3 deep, for $2\frac{1}{2}$ miles, where it enters the stream; at 3 miles farther are 3 locks, overcoming an ascent of 34 feet, and a short canal leading to Westham, at the upper end of Great Falls.—*James and Jackson river canal and navigation,* from Richmond basin, by canal, up the James, river valley, to the head of Maiden Adventure's falls, Goochland county. Distance, $30\frac{1}{2}$ miles; width of canal, 40 feet; depth, $3\frac{1}{2}$; finished in 1825; cost, \$623,295. Also from the lower end of Irish falls, or Piney island, by canal, along the margin of James river to the mouth of North Branch, in Rockland county. Distance, 7 miles. The fall is overcome by lockage 96 feet; cost, \$340,000.—*Shenandoah canals,* for the improvement of the Shenandoah. They are situated near Port Republic. A fall of 50 feet is overcome by six short canals with stone locks.—*Dismal Swamp canal* is $22\frac{1}{2}$ miles in length, 40 feet wide and $6\frac{1}{2}$ deep, passes from Deep creek to Joyce's creek, at the head of Pasquotank river, connecting the waters of the Chesapeake and Albemarle sound; partly in Virginia and partly in North Carolina. This canal was finished, upon a circumscribed plan, in 1822. Its dimensions have since been enlarged. Every quarter of a mile, the canal is widened 60 feet, for turn-out stations. The locks newly constructed correspond in dimensions with those of the Chesapeake and Delaware canal; and the old ones may be so altered when necessary. The summit level is $16\frac{1}{2}$ feet above the Atlantic at mid-tide, and is supplied by a feeder of five miles, from lake Drummond. The basin, at Deep creek, is half a mile in length, and 15 feet above the level of tide water. The North-west canal connects North-west river (which empties into Currituck sound in North Carolina) with the main canal, requiring a cut of

6 miles. This canal is 24 feet wide, 4 feet deep.—*Weldon canal* is 12 miles in length, along the Weldon or Great Falls in Roanoke river, in which distance the river descends 100 feet.—*Danville and Dan river canals* are a series of improvements on the upper branches of Roanoke river. The expenditure of the Roanoke navigation company, for these purposes, has been about \$350,000.—*Cape Fear river canals,* from New Inlet, at Smith's island, at the mouth of Cape Fear river, up the stream to Wilmington, and thence, by a course of lock and dam improvements, up to the head thereof, formed by the union of Deep and Haw rivers, below Haywoodsborough in Chatham county; distance, 200 miles. These canals, &c., are for the purpose of improving the navigation of the river. This work is prosecuting by the state of North Carolina.—*Wateree river and Catawba river canals,* from the confluence of the Congaree and Wateree rivers, up the course of the latter, as also of the Catawba river, across North Carolina, to near the source thereof. Distance, by the river channel improvements and lateral canals together, 275 miles.—*Santee, Columbia and Saluda canals,* from Columbia, through the Columbia canal, into Broad river, and through the Saluda canal, from Broad into Saluda river, up which and through Drehr and Lorick's canals, on to the Abbeville county line, near Cambridge; also from Santee river, by the Santee canal, into Cooper's river, and down this river to the port of Charleston. Distance, by mixed navigation, 150 miles. These comprise five canals, with 28 locks, overcoming falls of 217 feet. The Santee and Cooper's river canal is 22 miles long, uniting Santee river to the head of Cooper's river. The ground rises, by an ascent of 35 feet, to the summit level, by four locks. Towards Cooper's river, the descent is 68 feet, overcome by nine locks. The locks are 60 feet long by 10 feet wide. The canal is 32 feet wide at top, and 20 feet at the bottom; 4 feet deep. It was completed in 1802, at an expense of \$650,667.—*Winyaw canal* is 10 miles in length. It unites the Santee river with Winyaw bay.

Kentucky.—Louisville and Portland canal is about two miles in length, 50 feet wide at the bottom, with a lockage of $22\frac{1}{2}$ feet. It is not fully completed in 1831. It passes from the Ohio, at Louisville, to a point of the same below the rapids, near Portland. Distance, by the bend of the river, three miles; constructed by the Louisville and Portland canal company, which

was incorporated in 1825. The canal is for the passage of large vessels. It commences from the lower end of a basin or estuary, which extends along the shore of the river for the whole length of Louisville, and is connected with the river at its upper end. From the lower part of this basin, the canal traverses the point formed by the bend of the river at the falls, and reënters the river at Shippingsport. The bottom is to be 50 feet wide, sunk four feet below the level of the basin at Louisville, at time of low water; the banks to be elevated 2 feet above the highest water mark known at Louisville, which makes 42 feet from the bottom of the canal, and to be sloped as $1\frac{3}{4}$ base to 1, so far as respects the upper or earthen portion; and underneath there is a solid bed of stone for a foundation, the whole length of the canal, and this is to be cut perpendicularly, to the requisite depth, varying from 1 to 10 feet; the slope above which, to the top of each bank, is to be faced with stone. There are to be 3 lift-locks, of 7 feet lift each, and a guard-lock at the lower end of the canal; dimensions, 190 feet long by 50 feet wide, in the chamber. The U. States have contributed towards this important work.

Georgia.—*Savannah and Ogatehee canal* is 16 miles in length, 33 feet wide at the bottom, and 5 feet in depth, passing from Savannah river, commencing at Savannah, to the Ogatehee river; lockage, 29 feet; estimate of cost, \$162,276; locks to be 18 feet wide, 90 long. This is to be continued from the Ogatehee to the Alata-maha.

Louisiana.—*New Orleans and Teche river canal* is a projected and partly executed navigation, of 100 miles in length, from a point on the Mississippi, opposite New Orleans, to the waters which unite with the Teche river, at Berwick's bay. A portion of this canal, from Lafourche to Terrebonne, has been (1831) nearly completed by individual enterprise.—*Carondelet canal* is $1\frac{1}{2}$ miles long, 30 feet wide, and 4 feet deep, and extends from bayou St. John to a basin in the rear of the city of New Orleans. This canal is without locks. Through it the tide flows into the basin.—*Lafourche canal* passes from the river Lafourche, 16 miles below its efflux from the Mississippi. It is opened from the right bank into a small creek, uniting with lake Verret. It is through this channel, at high water, that boats are taken to and from the lower part of Attaceapas into the Mississippi, or from the latter stream; navigable only in times of high

flood.—*Plaquemine canal* passes from the Mississippi into bayou Plaquemine, at its efflux from the Mississippi. The mouth of the Plaquemine is closed by a raft of timber, and the canal (a short cut of about 400 yards) was made across the point, below the bayou. It is only navigable in times of high flood.

INN, a river in the south of Germany, rises in the Grisons, flows through Tyrol and Bavaria, and empties into the Danube at Passau. It is navigable from Telfs. Innsbruck (q. v.) is situated on this river.

INNATE IDEAS; certain primary notions, or impressions, supposed by many philosophers to be given to the mind of man when it first receives its being, and to be brought into the world with it. Their existence has afforded ground for much dispute among philosophers.

INNOCENT; the name of thirteen popes, among whom are the following:—*Innocent I*, saint, a native of Albano, succeeded Anastasius I as bishop of Rome, in 402. He was in great favor with the emperor Honorius, and induced him to take severe measures against the Donatists. He supported St. Chrysostom (q. v.), and renounced the communion with the Eastern churches, on account of their treatment of that eminent man. In 409, he was sent to obtain terms of peace from Alaric, but without success, in consequence of the opposition of the pretorian prefect Jovius. (q. v.) Rome was taken and pillaged, in 410, while Innocent was still in Ravenna. He condemned the Pelagians as heretics, in a letter to the African churches, but excited their opposition by his arrogant tone. He died in 417; according to some, in 416. He is one of the most distinguished among the saints; his day is July 28. His decrees (in the Collection of Dionysius Exiguus) and letters (most complete in Schönemann's *Pontif. Rom. Epist. genuinæ*) prove his zeal for the establishment of the Roman supremacy; but part of them are considered, by many critics, spurious. Zosimus was his successor.—*Innocent II*; a Roman of noble birth, elected pope, in 1130, by a part of the cardinals, whilst the others elected Peter of Leon, who took the name of *Anacletus*. Innocent fled to France, where, by the mediation of Peter of Clairvaux, he was acknowledged by the council of Etampes, by Louis VI, and, soon after, by Henry II of England, also by the German king Lothaire, who conducted him, in 1133, to Rome, where he occupied the Lateran, whilst Anacletus occupied the castle of Crescentius, the church of St. Peter, and a large part of

the city. Innocent was soon obliged to retire to Pisa, and, though the emperor reinstated him, in 1137, Anacletus maintained himself until his death, in 1138. Having prevailed against another anti-pope, he held the second œcumenical council in the Lateran, where nearly 1000 bishops condemned Arnold of Brescia and his heresy, declared all the decrees of Anacletus null, and excommunicated Roger of Sicily, who had supported the latter. But Roger waged war against the pope, made him prisoner, and obliged Innocent to acknowledge him as king, absolve him from excommunication, and invest him and his heirs with Apulia, Calabria and Capua. Towards the end of his pontificate, he put France under an interdict, and had to struggle with constant disturbances in Rome and Tivoli. He died in 1143. Celestine II succeeded him. His letters are to be found in Baluze, Martène and others.—*Innocent III*, Lothaire, count of Segni, born at Anagni, in 1161, studied in Rome, Padua and Bologna. On the death of Celestine III (1198) cardinal John of Salerno declined the pontificate, which had been offered to him, and proposed Lothaire, who was unanimously elected, at the age of 37. The death of the emperor Henry VI, in 1197, had thrown the imperial affairs in Italy into the greatest confusion. Innocent, in the vigor of manhood, endowed by nature with all the talents of a ruler, possessed of an erudition uncommon at that time, and favored by circumstances, was better qualified than any of his predecessors to elevate the papal power, which he considered as the source of all secular power. By his clemency and prudence, he gained over the inhabitants of Rome, obliged the imperial prefect to take the oath of allegiance to him, and directed his attention to every quarter where he believed, or pretended to believe, that a papal claim of property, or of feudal rights, existed. From the imperial seneschal, duke Marquard of Romagna, he required homage for the Mark of Ancona, and, on his refusal to comply, took possession of the Mark, with the assistance of the inhabitants, who were dissatisfied with the imperial government, and excommunicated Marquard; obliged the duke Conrad of Spoleto to resign that duchy, and would also have taken Ravenna, if the archbishop had not prevented him. He concluded treaties with many cities of Tuscany for the mutual protection of their liberties and those of the church. Thus he soon obtained possession of the ecclesiastical states, in

their widest extent. He conferred Naples on the widowed empress Constantia and her minor son, afterwards the emperor Frederic II, after having abolished all the privileges conceded by Adrian IV, in 1156, assumed the guardianship of the young prince, after the decease of the empress, and frustrated all the machinations of Marquard to deprive him of his inheritance. In Germany, Innocent favored the election of Otho IV against Philip of Suabia, crowned him, in 1209, at Rome, but soon became involved in disputes with him, on account of his violations of the promises which he had made to the church. He excommunicated Philip Augustus, king of France, laid the kingdom under an interdict, in 1200, because Philip had repudiated his wife, Ingelburge, and obliged the king to submit. He was still more decided in his treatment of John (q. v.), king of England, who refused to confirm the election of Stephen Langton as archbishop of Canterbury. Innocent laid the kingdom under an interdict, and, in 1212, formally deposed him, and instigated the king of France to attack England. John was finally obliged to submit, resigned his territories to Rome, and received them, as a papal fief, from Innocent, from whom he was unable to obtain absolution until he had paid large sums of money. Almost all Christendom was now subject to the pope; two crusades were undertaken at his order, and his influence extended even to Constantinople. Innocent was one of the greatest of popes and rulers; he acted in accordance with the principles laid down in his writings; he enforced purity of morals in the clergy, and was himself irreproachable in private life; yet the cruel persecution of the Albigenses in the south of France, which he encouraged, though without approving of all its rigors, and the inquisitorial tribunals established by him in 1198, from which the inquisition itself originated, are stains on his pontificate, but partially effaced by a consideration of the spirit of the times and the disordered state of the Christian world. It may be said of his rule, as of that of Gregory VII, whom he most resembles, that, in those times, the power of the pope was salutary, as a bond of union for Europe, in which the still firmer bond of a common civilization and knowledge did not, as at present, exist. His attacks on the secular power are to be considered as the struggle between the ecclesiastical and secular power, which was natural and necessary in the developement of European civilization. If he had not subdued

the monarchs, they would have crushed the papal power. In 1215, he held a council of more than 1300 archbishops, bishops, prelates and ambassadors of European princes, by which transubstantiation in the Lord's supper and auricular confession were established as dogmas, Frederic II was acknowledged as German emperor, and the Franciscan and Dominican orders were confirmed. Innocent died soon after, on the 16th of July, 1216. Some of his works on legal and theological subjects were published in Cologne, 1575, folio. The best edition of his letters, important for the history of the time (11 books), is that of Baluze (Paris, 1682). The *Stabat Mater* and *Veni Sancte Spiritus*, and other sacred hymns, are said to have been written by him. Honorius III succeeded him.—Innocent XI (Benedict Odescalchi) was born at Como, in 1611, served, in his youth, as a soldier, in Germany and Poland, took orders, at a later period, and rose through many important posts, until he was elected pope in 1676, on the death of Clement X. He was eminent for his probity and austerity; he zealously opposed nepotism (q. v.) and simony, restrained luxury and excess, and even prohibited women from learning music. Though hostile to the Jesuits, whose doctrine of probabilities he publicly disapproved, and attacked 65 of their opinions in the decree *Super quibusdam axiomat. moralibus*, yet he was obliged to condemn Molinus and the Quietists. He determined to abolish the privileged quarters (the ground for a considerable distance around the palaces of certain ambassadors in Rome, which was considered as foreign territory, in which criminals were out of reach of the authorities); but Louis XIV. the vainest of monarchs, would not yield to so just a claim, occupied Avignon, and imprisoned the papal nuncio in France; in consequence of which the authority, and particularly the acknowledgment of the infallibility of the pope, received a severe blow, by the *IV Propositiones Cleri Gallicani*, in 1682. (See *Infallibility*, and *Gallican Church*.) These disputes were highly favorable to the English revolution, as it induced the pope, in 1689, to unite with the allies against James II, in order to lower the influence of Louis XIV. His conduct in this respect has led many Catholics to assert that he sacrificed the Catholic religion to his personal resentment; and it was pointedly said, that "to put an end to the troubles of Europe, it was only necessary for James II to become a Protestant, and the pope a Catholic." Bayle, however, judiciously ob-

serves, that the extreme predominance of any great Catholic sovereign is injurious to the interests of the papacy, and mentions the similar conduct of Sixtus V, another able pope, in relation to Philip II of Spain and queen Elizabeth of England. Innocent died August 12, 1689, at the age of 78, leaving behind him the character of an able and economical pontiff, and of an honest and moral man. Had he not died, an open rupture with France might have ensued. Alexander VIII succeeded him.

INNS OF COURT. The colleges of the English professors and students of common law are called *inns*, the old English word for the houses of noblemen, bishops, and others of extraordinary note, being of the same signification as the French *hôtel*. It is not possible to determine precisely the antiquity of the establishment of inns of court. The received opinion is, that societies of lawyers, which, before the conquest, held their chief abodes for study in ecclesiastical houses, began to be collected into permanent residences, soon after the court of common pleas was directed to be held in a fixed place,—a stipulation which occurs in the great charters both of king John and Henry III. In these houses exercises were performed, lectures read, and degrees conferred; that of barristers, or, as they were first styled, *apprentices* (from *apprendre*, to learn), answering to bachelors; that of sergeants (*servientes ad legem*) to doctors. The inns of court were much celebrated for the magnificence of their revels. The last of these took place in 1733, in the Inner Temple, in honor of Mr. Talbot, when he took leave of that house, of which he was a benchor, on having the great seal delivered to him. Fortescue, lord chancellor of England in the reign of Henry VI, says, in his treatise *De Laudibus Legum Angliæ*, that, in his time, there were about 2000 students in the inns of court and chancery, all of whom were gentlemen born. In the reign of queen Elizabeth, sir Edward Coke did not reckon above a thousand students, and the number at present is very considerably less. The inns of court are governed by masters, principals, benchers, stewards and other officers, and have public halls for exercises, readings, &c., which the students are obliged to attend and perform for a certain number of years, before they can be admitted to plead at the bar. These societies have not any judicial authority over their members; but, instead of this, they have certain orders among themselves, which have, by consent, the force of laws. For light offences, persons are

only excommunicated, or put out of commons; for greater, they lose their chambers, and are expelled the college; and, when once expelled from one society, they are never received into any of the others. The gentlemen in these societies may be divided into benchers, outer barristers, inner barristers and students. The four principal inns of court are the Inner Temple and Middle Temple (formerly the dwelling of the knights Templars, and purchased by some professors of the common law, more than three centuries since); Lincoln's Inn and Gray's Inn (anciently belonging to the earls of Lincoln and Gray). The other inns are the two Sergeants' Inns.—*Inns of Chancery* were probably so called because anciently inhabited by such clerks as chiefly studied the forming of writs, which regularly belonged to the cursitors, who are officers of chancery. These are Thavie's Inn, the New Inn, Symond's Inn, Clement's Inn, Clifford's Inn (formerly the mansion of lord Clifford), Staple's Inn (which belonged to the merchants of the staple), Lion's Inn (anciently a common inn, with the sign of the lion), Furnival's Inn, and Bernard's Inn. These were formerly preparatory colleges for younger students, and many were entered here before they were admitted into the inns of court: now they are mostly taken up by attorneys, solicitors, &c. At the present day, previously to being called to the bar, it is necessary to be admitted a member of one of the inns of court. The regulations of Lincoln's Inn, to which those of the other inns bear a strong resemblance, are alone given in the following account:—The applicant for admission need not be present, but the application may be made through the medium of a third person; the applicant must be recommended to the society by one of its members, or by two housekeepers, who are required to certify that they know the applicant to be a proper person for admission. A bond must also be entered into by the applicant himself and the recommending member, or housekeepers, in the sum of £100, conditioned for the due payment of his fees to the society. The fees are generally more than £6 and less than £8 a year; the expense of admission, in the year 1827, amounted to £31 16s. Before the student commences keeping his terms for the English law, he must deposit with the society the sum of £100, which is returned, without interest, if the student dies, or quits the society, or is called to the bar. No deposit is required from those who can produce a certificate of having kept two years' terms

in the universities of Oxford, Cambridge, or Dublin, or of being of the faculty of advocates in Scotland, nor from those who are admitted merely for the purpose of being called to the Irish bar. Persons removing from one inn to another are allowed the terms which they have kept in their original inns. A term is kept by the student being present at five dinners during the term; three dinners suffice for three quarters of a term; one dinner, during the grand week, for half a term. The student must keep 12 terms (60 dinners) before he can be called to the bar, and his name must have been five years on the books, unless he produces a certificate of having taken the degree of master of arts, or bachelor of law, at Oxford, Cambridge, or Dublin, in which case three years will suffice. He must also have gone nine times through a certain ceremony, which is called *performing an exercise*. Exercises are performed thus:—The student is furnished, by the steward of the society, with a piece of paper, on which is supposed to be written an argument on some point of law, but, owing to the negligence of successive copyists, the writing now consists of a piece of legal jargon, wholly unintelligible. When, after dinner, grace has been said, the student advances to the barrister's table, and commences reading from this paper; upon which one of the senior barristers present makes him a slight bow, takes the paper from him, and tells him that it is quite sufficient. Students intended for the Irish bar keep eight terms in England, and the remainder in Ireland. When the 12 terms have been kept, and the nine exercises performed, the student may petition the benchers to call him to the bar. Except under very peculiar circumstances, the petition is granted, as a matter of course. After dinner, on the day appointed for the call, the student is required to take certain oaths. He then retires with the benchers to the council chamber, which adjoins the hall, to sign the register of his call. There are certain oaths to be taken in the courts of Westminster hall. These should be taken within six months after the call. No attorney, solicitor, clerk in chancery or the exchequer, unless he has discontinued practice for two years in such branches of his profession, and no person who is in deacon's orders, or under 21 years of age, can be called. The expense of being called is between £90 and £100. The three years, during which a student is keeping terms, are spent by him in the chambers of a conveyancer, an equity draftsman, or a special pleader.

INNSBRUCK, INSPRUCK, INNSERUCK, OR INSBURG; the capital of Tyrol, on the Inn, over which there is a bridge; lat. 47° 16' 18" N.; lon. 11° 23' 53" E. The city, 1754 feet above the level of the sea, has considerable suburbs, some fine churches, 10,200 inhabitants, and 574 houses. It contains a university, and a general seminary for Tyrol connected with it, and manufactories of several kinds. The works of art in one of the churches, particularly the statues in bronze of the members of the house of Hapsburg, are celebrated. Not far from Innsbruck is the castle of Ambras. (q. v.) Innsbruck is the seat of the Austrian provincial government for Tyrol, and of the assembly of the estates established in 1816. (See *Austria*.)

INNUENDO. In an action for a written libel, or for verbal slander, if the offensive words are not in themselves sufficiently intelligible, or if, without explanation, their slanderous tendency does not appear, it is usual for the plaintiff, in his declaration, which is the written statement of his complaint, to insert parenthetically into the body of the libel the necessary explanation; as, for instance—He (meaning the plaintiff) is forsworn (meaning that he had perjured himself in prosecuting the said defendant). These comments have the Latin name *innuendo*, signifying *meaning*, because *innuendo*, in former times, was always used instead of the word *meaning*, in these explanations. The general rule with regard to innuendoes is, that they must be merely explanatory, introducing no new matter, but only referring to something previously mentioned.

INO, daughter of Cadmus and Harmonia, second wife of Athamas, king of Thebes, drew upon herself the anger of Juno by nursing the young Bacchus, the son of her sister, Semele. In order to favor her own children, she projected the murder of her step-children, Phryxus and Helle. Being warned by their mother, Nephele, who appeared to them in a dream, they saved themselves by flight. Juno was still more highly incensed against Ino by this attempt; she made Athamas, the husband of Ino, mad, and, in his frenzy, he dashed his eldest son by Ino, Learchus, against a rock. Ino fled with her youngest son, Melicerta, and threw herself with him into the sea. The body of the boy was carried by a dolphin to the shore, where king Sisyphus caused it to be buried, and instituted in honor of him the well-known Isthmian games (q. v.), as Ino and Melicerta were made sea-deities, at the prayer of Venus. Ino was worshipped under the name of *Leu-*

colthea. According to another account, the body of Melicerta was at first left unburied, and caused a dreadful pestilence, whereupon the oracle, being consulted, ordered that the body should be buried with the usual rites, and that games should be instituted in honor of Melicerta.

INOCULATION. (See *Small Pox*, and *Vaccination*.)

IN PALCO (*Ital.*); an expression alluding to a stage performance. Oratorios were originally performed in Italy on a stage erected in the church; that is, *in palco*.

IN PONTIFICALIBUS (*Latin*), in the dress of a priest; frequently applied, in sport, to a person in full dress on any occasion.

INQUISITION. The immediate cause of the erection of the tribunals of faith, was the sect of the Albigenses, the persecution of whom, in the 12th and 13th centuries, made the south of France a scene of blood. (See *Albigenses*.) The project of extirpating the rebellious members of the church, and of extending the papal power at the expense of the bishops, by means of the inquisition, was conceived by pope Innocent III (who ascended the papal chair in 1198), and was completed by his immediate successors. This tribunal, called the *holy inquisition* or the *holy office* (*sanctum officium*), was under the immediate direction of the papal chair; it was to seek out heretics and adherents of false doctrines, and to pronounce its dreadful sentence against their fortune, their honor and their lives, without appeal. The process of this tribunal differed entirely from that of the civil courts. The informer was not only concealed, but rewarded by the inquisition. The accused was obliged to be his own accuser; suspected persons were secretly seized and thrown into prison. No better instruments could be found for inquisitors, than the mendicant orders of monks, particularly the Franciscans and Dominicans, whom the pope employed to destroy the heretics, and inquire into the conduct of bishops. Pope Gregory IX, in 1233, completed the design of his predecessors, and, as they had succeeded in giving these inquisitorial monks, who were wholly dependent on the pope, an unlimited power, and in rendering the interference of the temporal magistrates only nominal, the inquisition was successively introduced into several parts of Italy, and into some provinces of France; its power in the latter country being more limited than in the former. The tribunals of faith were admitted into Spain in the middle of the 13th century, but a firm opposition was made to them, particularly in Cas-

tile and Leon, and the bishops there maintained their exclusive jurisdiction in spiritual matters. But a change afterwards took place; and while, in other countries of Europe, the inquisition could never obtain a firm footing, but in some fell entirely into disuse, as in France, and in others, as in Venice, was closely watched by the civil power, an institution grew up in Spain, towards the end of the 15th century, which was the most remarkable of all the inquisitorial courts of the middle ages, and differed much from the rest in its objects and organization. Ferdinand of Arragon, and Isabella of Castile, having united their power, made many efforts to break the strength of the nobles, and to render the royal authority absolute. The inquisition was used as a means of effecting their plans. There were three religious parties in Spain, Christians, Jews and Mohammedans. The Moors still maintained possession of the last remnant of their empire, the kingdom of Grenada, which was, however, already threatened by the arms of Ferdinand and Isabella. The Jews had their synagogues, and formed a distinct class in the principal cities of Spain. Commerce was principally in their hands; they were the lessees of the king and the nobles, and suffered no oppression, being subject only to a moderate capitation tax, which they had been obliged to pay to the clergy since the year 1302. The riches which they had amassed by their industry, exposed them to great envy and hatred, which was nourished by the ignorant priests. The sermons of a fanatical monk, Fernando Martinez Nuñez, who preached the persecution of the Jews as a good work, was the principal cause of the popular tumults in many cities, in 1391 and 1392, in which this unhappy people was plundered, robbed and murdered. Many Jews submitted to baptism, to save their lives, and the descendants of these unfortunate men were, for about 100 years, the first victims of inquisitorial zeal. In 1477, when several turbulent nobles had been reduced in the southern part of Spain, queen Isabella went to Seville with the cardinal Pedro Gonzalez de Mendoza: there this prelate, as archbishop of Seville, made the first attempt to introduce the inquisition. At his command, punishments were publicly and privately inflicted, and it was discovered, among other things, that many citizens of Seville, of Jewish origin, followed, in private, the manners and customs of their fathers. The cardinal charged some of the clergy privately to enlighten

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the faith of these people, and to make the hypocrites true sons of the church. These teachers brought back many to the faith; but many, who persevered in their opposition to the doctrines of the church, were condemned and punished. After this prelude, the design was disclosed of extending the inquisition over the whole country; and Mendoza laid the project before the sovereigns Ferdinand and Isabella. They approved of an institution, which, at the same time, suited the persecuting spirit of the age, and could be used as a powerful engine of state. The design was, by means of this institution, which was to be entirely dependent on the court, to oppress those who were, either secretly or openly, Jews or Mohammedans (and many Christian nobles belonged to the party of the Mohammedans, the standing allies of malcontents), to enrich the royal treasury, to which the property of the condemned was confiscated, and to limit the power of the nobles, and even of the clergy. In the assembly of the estates, held at Toledo, 1480, the erection of the new tribunal was urged by the cardinal. After the superior branches of administration—the supreme council of Castile, the council of state, the board of finance, and the council of Arragon—had been confirmed by the estates, the cardinal declared that it was necessary to establish a permanent tribunal, to take cognizance of matters of faith, and administer the ecclesiastical police. In spite of all opposition, it was determined to establish a tribunal, under the name of the general inquisition (*general inquisición suprema*), and the new court was soon opened in Seville (1481). Thomas de Torquemada, prior of the Dominican convent at Segovia, and father-confessor to the cardinal Mendoza, had already been appointed by Ferdinand and Isabella, the first grand inquisitor, in 1478. He had 200 familiars and a guard of 50 horsemen, but he lived in continual fear of poison. The Dominican monastery at Seville soon became insufficient to contain the numerous prisoners, and the king removed the court to the castle in the suburb of Triana. At the first *auto da fe* (act of faith), seven apostate Christians were burnt, and the number of penitents was much greater. Spanish writers relate, that above 17,000 gave themselves up to the inquisition, more than 2000 were condemned to the flames the first year, and great numbers fled to the neighboring countries. Many Jews escaped into Portugal, Africa and other places. The pope, however, had

opposed the establishment of the Spanish inquisition, as the conversion of an ecclesiastical into a secular tribunal. Soon after the appointment of the new inquisitor, he had directed the archbishop of Toledo, a warm enemy of Mendoza, to hold a solemn court over a teacher in Salamanca, who was charged with heretical opinions, and the inquisitor-general was repeatedly summoned to Rome. Torquemada, however, did not obey the summons, but sent a friend to defend his cause. The contest between the pope and the Spanish court, was carried on with heat, until 1483, when Sixtus IV was obliged to yield, and acknowledge Torquemada as inquisitor-general of Castile and Leon. He was also authorized, by the papal bull, to establish inferior courts at pleasure, to remove those judges who had been appointed by the pope, and to regulate the manner of proceeding in inquiries respecting matters of faith according to the new plan. A later bull subjected Arragon, Valencia and Sicily, the hereditary dominions of Ferdinand, to the inquisitor-general of Castile; and thus the inquisition was the first tribunal whose jurisdiction extended over the two Spanish kingdoms of Castile and Arragon; the Arragonese estates, at their session at Tarragona, in 1484, being obliged to swear to protect the inquisition. The introduction of the new tribunal was attended with risings and opposition in many places, excited by the cruelty of the inquisitors, and encouraged, perhaps, by the jealousy of the bishops; several places, particularly Saragossa, refused admission to the inquisitors, many of whom lost their lives; but the people were obliged to yield in the contest, and the kings became the absolute judges in matters of faith; the honor, the property and the life of every subject was in their hands. They named the grand inquisitor, and by them, or under their immediate influence, were his assessors appointed, even the secular ones, two of whom were of the supreme council of Castile, laymen being permitted to hold the office. This tribunal was thus wholly dependent on the court, and became a powerful instrument for establishing the arbitrary power of the king on the ruins of the national freedom; for putting down the clergy, who had previously acknowledged only the jurisdiction of the Roman see; for oppressing the bold nobles, and taking away the privileges of the estates. The property of those who were condemned, fell to the king; and, although it had been granted to the inquisition, it was still at his dispo-

sition. Ferdinand and Isabella, indeed, devoted a part of this property to found convents and hospitals; but the church, notwithstanding, lost many possessions by means of the inquisition; and an ordinance, drawn by Torquemada (1487), proves that it was a source of revenue to the king, supplying the treasury, which was exhausted by the war: the inquisitorial chest was, indeed, at that time, drained by so many royal drafts, that the officers could not obtain their salaries. The first ordinance, by Torquemada, dedicating the tribunal to the service of God and their majesties, bears date 1484. Among other articles are the following, showing the political importance of the institution. In every community, the grand inquisitor shall fix a period, from 30 to 40 days, within which time, heretics, and those who have relapsed from the faith, shall deliver themselves up to the inquisition. Penitent heretics and apostates, although pardoned, could hold no public office; they could not become lessees, lawyers, physicians, apothecaries or grocers; they could not wear gold, silver or precious stones, or ride, or carry arms, during their whole life, under penalty of being declared guilty of a relapse into heresy; and they were obliged to give up a part of their property for the support of the war against the Moors. Those who did not surrender themselves within the time fixed, were deprived of their property irrevocably. The absent also, and those who had been long dead, could be condemned, provided there was sufficient evidence against them. The bones of those who were condemned after death, were dug up, and the property which they had left reverted to the king. Torquemada died in 1493, and was buried in the Dominican convent at Avila, which had been built with the property taken from heretics, and was a monument of his cruel zeal. He had resigned his office two years before, being afflicted with the gout. According to another account, Torquemada did not retire so quietly from the stage. It is said that, suspecting that Ferdinand and Isabella, whom the wars with the Moors had involved in great pecuniary embarrassments, would be moved, by the great sums which were offered them, to limit the privileges of the inquisition, and disturbed by this apprehension, he went to the royal palace, with a crucifix under his mantle. "I know your thoughts," said he boldly to the sovereigns; "behold the form of the crucified one, whom the godless Judas sold to his enemies for 30

pieces of silver. If you approve the act, yet sell him dearer. Here lay down my office, and am free from all responsibility; but you shall give an account to God." He then laid down the cross, and left the palace. At first, the jurisdiction of the inquisition was not accurately defined; but it received a more regular organization by the ordinance of 1484, establishing branches in the different provinces of Spain, under the direction of the inquisitor-general. In later times, the supreme tribunal was at Madrid. The inquisitor-general presided. Of the six or seven counsellors, whom he appointed on the nomination of the king, one, according to an ordinance of Philip III, must be a Dominican. He had a fiscal, two secretaries, a receiver, two relatores, and several *officials*, as they were called, who were appointed by the grand inquisitor, in concurrence with the king. The inquisitorial council assembled every day, except on holydays, in the royal palace; on the last three days of the week, two members of the council of Castile were present at the meeting. It was the duty of some of the officers (*calificadores*) to explain whether any act or opinion was contrary to the doctrines of the church; others were lawyers, who merely had a deliberative voice. The sentence of the inquisition was definitive. It was the duty of the fiscal to examine the witnesses, to give information of criminals, to demand their apprehension, and to accuse them when seized. He was present at the examination of the witnesses, at the torture, and at the meeting of the judges, where the votes were taken. It was the duty of the registers, besides the preparation of the necessary papers, to observe the accuser, the witnesses and the accused, during their legal examination, and to watch closely the slightest motion by which their feelings might betray themselves. The officials were persons sent by the court to arrest the accused. A *secuestrador*, who was obliged to give sureties to the office, kept an account of the confiscated property. The receiver took the money which came from the sale of sequestered property, and paid the salaries and drafts on the treasury. It is computed, that there were in Spain above 20,000 officers of the inquisition, called *familiars*, who served as spies and informers. These places were sought even by persons of rank, on account of the great privileges connected with them. As soon as an accuser appeared, and the fiscal had called upon the court to exercise their authority, an order was issued to seize the

accused. In an ordinance of 1732, it was made the duty of all believers, to inform the inquisition if they knew any one, living or dead, present or absent, who had wandered from the faith, who did observe or had observed the law of Moses, or even spoken favorably of it; if they knew any one, who followed or had followed the doctrines of Luther; any one who had concluded an alliance with the devil, either expressly or virtually; any one who possessed any heretical book, or the Koran, or the Bible in the Spanish tongue; or, in fine, if they knew any one who had harbored, received or favored heretics. If the accused did not appear at the third summons, he was excommunicated. From the moment that the prisoner was in the power of the court, he was cut off from the world. The prisons, called *holy houses* (*casas santas*), consisted of vaulted apartments, each divided into several square cells, which were about 10 feet high, and stood in two rows, one over the other. In the upper cells, a dim ray of light fell through a grate; the lower were smaller and darker. Each dungeon had two doors. The inner, which was bound with iron, had a grate through which food was introduced for the prisoner. The other door was opened, early in the morning, to air the cell. The prisoner was allowed no visits from his friends or relations; no book of devotion was given him; he was compelled to sit motionless and silent in his dark cell, and, if his feelings found vent in a tone of complaint, or even in a pious hymn, the ever-watchful keeper warned him to be silent. Only one captive was usually placed in each cell, unless for the purpose of making discoveries. At the first hearing, the accused was called upon to confess his guilt. If he confessed the crime of which he was accused, he pronounced his own sentence, and his property was confiscated. If he declared himself innocent, contrary to the testimony of the witnesses, he was threatened with torture. The advocate who was appointed to defend him, could not speak to him, except in the presence of the inquisitors. The accused was not confronted with the accuser nor the witnesses before the court, neither were they made known to him; and he was often subjected to the torture (*q. v.*), to extort a confession or to explain circumstances which had not been fully explained by the witnesses. Those who escaped death by repentance and confessions, were obliged to abjure their errors, and to swear to submit to all the pains and penalties which the court

ordered. Imprisonment, often for life, scourging, and the loss of property, were the punishments to which the penitent was subjected. He was made infamous, as well as his children and grand-children. Wearing the *san-benito* (the blessed vest of penitence, a sort of coarse, yellow tunic, with a cross on the breast and back, and painted over with devils) was a common method of punishment. An accused person, who was fortunate enough to escape before the officers of the inquisition could seize him, was treated as an obstinate heretic. Summonses were posted up in all the public places, calling on him to appear. If he did not do this within a certain time, and if the evidence of the witnesses proved the charges, he was delivered over to the secular power, and burnt in effigy. Persons who had been dead more than 40 years, were condemned, and, though their children retained possession of the property they had inherited, yet they were dishonored, and rendered incapable of holding any public office. When sentence of death was pronounced against the accused, the holy *auto da fe* was ordered. This usually took place on Sunday, between Trinity Sunday and Advent. At day-break, the solemn sound of the great bell of the cathedral called the faithful to the dreadful spectacle. Men of high rank pressed forward to offer their services in accompanying the condemned, and *grandees* were often seen acting as familiars to the inquisition. The condemned appeared barefooted, clothed in the dreadful *san-benito*, with a conical cap (*caroza*) on their heads. The Dominicans, with the banner of the inquisition, led the way. Then came the penitents, who were to be punished by fines, &c., and after the cross, which was borne behind the penitents, walked the unfortunate wretches who were condemned to death. The effigies of those who had fled, and the bones of the dead who had been condemned, appeared in black coffins, painted over with flames and hellish forms; and the dreadful procession was closed by monks and priests. It proceeded through the principal streets of the city to the church, where a sermon was preached, and the sentence was then pronounced. The convicted stood, during this act, before a crucifix, with an extinguished taper in their hands. As "the church never pollutes herself with blood," a servant of the inquisition, when this ceremony was finished, gave each of those who had been sentenced a blow with the hand, to signify that the inquisition had no longer any

power over them, and that the victims were abandoned (*relaxados*) to the secular arm. A civil officer, "who was affectionately charged to treat them kindly and mercifully," now received the condemned, bound them with chains, and led them to the place of execution. They were then asked in what faith they would die. Those who answered the Catholic, were first strangled; the rest were burnt alive. The *autos da fe* were spectacles to which the people thronged as eagerly as to the celebration of a victory. Even the kings considered it a meritorious act to be present, with their courts, and to witness the agonies of the victims. In this manner did the inquisition proceed, in the times of its most dreadful activity. The Spaniards found their personal freedom so much restrained, even in the early period of the existence of this office, that one of the principal requests of the disaffected, in the reign of Charles I, was, that the king should compel the inquisition to act according to the principles of justice. But the important influence which this court had, in the course of the following century, both on the state and on the moral character of the Spaniards, could not, at that time, have been anticipated. This noble and high-spirited people were more debased by the dark power of the inquisition than by any other instrument of arbitrary government, and the stagnation of intellectual action, which followed the discovery of America, concurred, with other fatal causes, to diminish the industry of the people, to weaken the power of the state, and to prevent, for a long time, any progress to higher degrees of moral and intellectual improvement. In more modern times, when the spirit of persecution was restrained in almost all other countries of Europe, the original organization of the inquisition was but little changed; still the dread of this dark court gradually diminished. The horrible spectacle of an *auto da fe* was seldom witnessed during the last century, and the punishments of the inquisition were confined, in a considerable degree, to those men who had become obnoxious to justice. In 1762, the grand inquisitor having, contrary to the express will of the king, published a bull, excommunicating a French book, was exiled to a monastery at a distance from Madrid. A royal decree forbade the inquisition to issue any commands without the consent of the king, and required the grand inquisitor, in the condemnation of books, to conform to the laws of the land, and to make known his prohibition only

by virtue of the power given him by his office, and not with the citation of bulls. The decree also ordered that, before prohibiting any book, the author should be cited, that his defence might be heard. In 1770, during the administration of Aranda, the power of the inquisition was limited to the punishment of obstinate heretics and apostates, and it was forbidden to imprison any of the king's subjects, without first fully proving their guilt. In 1784, it was determined that, if the inquisition instituted a process against a grandee, a minister, or, in short, against any officer of rank, its acts must be subjected to the royal inspection. If we consider the principal acts of the inquisition during the 18th century, we shall see that, notwithstanding the restraint exercised over it, it still remained an instrument which, under favorable circumstances, might exert a terrible influence. There were 16 provincial inquisitions in Spain and the colonies, all subject to the supreme tribunal. As late as 1763, we find that, at an *auto da fê* at Llerena, some obstinate heretics were committed to the flames, and, in 1777, the inquisition armed itself with all its terrors against a man who was guilty of nothing more than imprudence—the celebrated Olavides (q. v.); and, in 1780, a poor woman of Seville was declared guilty of witchcraft, and was burnt alive at the stake. With all the limits which had been set to its power, with all the mildness of the tribunal, whose principal officers, under the preceding reigns, had been mostly men of intelligence and moderation, still the odious spirit of the institution, and the unjust form of procedure, survived; and, until the moment when it was abolished by Napoleon (Dec. 4, 1808), the inquisition continued to be a powerful obstacle to the progress of the human intellect. The inquisition published annually a catalogue of prohibited books, in which, among some infidel and immoral works, many excellent or innocent books were included. All the attempts of enlightened men, towards effecting the destruction of this antiquated instrument of a dark policy, during the two last reigns, were without connexion, and therefore without effect, and they sunk under the artifices which an all-powerful favorite, the clergy and the inquisition employed for their common advantage. The process, concluded as late as 1806, against two learned and excellent canons—Antonio and Geronimo Cuesta, whose destruction their unworthy bishop, under the protection of the prince of peace, had striven to

effect—was the last sign of life in this terrible court, and plainly shows that intrigue, when united with the secret power of the inquisition, had great influence in Spain, even in recent times; and the decision of the king, which declared the accused innocent, and condemned the proceedings of the inquisition as contrary to law, was yet tender towards the inquisitors, and confirmed the general opinion, which punished those who had fallen into the power of the inquisition with the loss of public esteem. According to the estimate of Llorente, the number of victims of the Spanish inquisition, from 1481 to 1808, amounted to 341,021. Of these, 31,912 were burnt, 17,659 burnt in effigy, and 291,456 were subjected to severe penance. Ferdinand VII reëstablished (1814) the inquisition, which had been abolished during the French rule in Spain; but, on the adoption of the constitution of the cortes (1820), it was again abolished, and was not revived in 1823, by the advice of the European powers.—In Portugal, the inquisition was established, after a long contest, in 1557. The supreme tribunal was in Lisbon; inferior courts, established in the other cities, were subject to this. The grand inquisitor was nominated by the king, and confirmed by the pope. John of Braganza, after the delivery of the country from the Spanish yoke, wished to destroy the inquisition. But he succeeded only in depriving it of the right of confiscating the property of the condemned. On this account, he was excommunicated after his death, and his wife was obliged to permit his body to receive absolution. As the Spaniards took the inquisition with them to America, so the Portuguese carried it to India, and established it at Goa. In the 18th century, the power of the inquisition in Portugal was restrained by the ordinance which commanded that the accuser of the court should furnish the accused with the heads of the accusation and the names of the witnesses, that the accused should be allowed to have the aid of counsel, and that no sentence of the inquisition should be executed until confirmed by the royal council. The late king abolished the inquisition, not only in Portugal, but also in Brazil and the East Indies, and caused all its records at Goa to be burnt.—The inquisition restored in Rome by Pius VII, has jurisdiction only over the clergy, and is not therefore dangerous to those who are not Catholics. In 1826, it condemned to death Caschiur, a pupil of the Propaganda, who was appointed patriarch of

Memphis, but not accepted by the viceroy of Egypt. The pope changed the punishment into imprisonment for life. His crime is unknown.—Among the late works on the inquisition, are Llorente's *History of the Spanish Inquisition* (Paris, 1815; in English, London, 1827), and Antonio Puigblanch's *Inquisition Unmasked*, from the Spanish (London, 1816). The *Records of the Inquisition*, from the original MSS., taken from the Inquisitorial Palace at Barcelona, when it was stormed by the Insurrectionists in 1819 (Boston, 1828), contain interesting reports of some particular cases.

INQUISITION, PROCESS OF. This phrase is used, on the continent of Europe, to designate that kind of criminal process in which the court takes upon itself the investigation of an offence, by appointing one of its members to collect the proofs of the crime, as, for instance, in the German courts. Thus the process of inquisition differs from what is called the *process of accusation*, where the court stands between the government and the accused, as it does in England and the U. States. In civil cases, the process of accusation prevails also in the German courts. (See *Process*; also *Accusation*, and *Act*.)

I. N. R. I.; abbreviation for *Jesus Nazarenus Rex Judæorum* (Jesus of Nazareth, King of the Jews); the inscription which Pilate put over the head of Christ when he was crucified.

INSANITY. (See *Mental Derangement*.)

INSCRIPTION, in archæology, is used to designate any monumental writing, intended to commemorate some remarkable event, to preserve the name of the builder of a monument, or of the person in whose honor it was erected, &c. Inscriptions are one of the most important sources of history, particularly for the earlier periods of nations, when other written documents are rare or entirely wanting, and tradition is the only medium of historical knowledge. After the invention of the alphabet, the earliest application of the art of writing is by engravings on wood, stone or metals; and, after other and more convenient materials have come into common use, this method is still preferred for many purposes, on account of the greater durability of the material. We have inscriptions, therefore, from all nations who have arrived at a certain stage of civilization, on walls of temples, tombs, triumphal monuments, tablets, vases, &c., containing laws, decrees, treaties, religious legends, moral, philosophical or scientific precepts, chronological tables, &c., generally con-

temporary with the events they commemorate. Indian, Persian, Egyptian, Phœnician, Etruscan, Grecian, Roman, &c., inscriptions, have been diligently studied, and have made important revelations in the hands of learned and ingenious men. The Egyptian monuments are numerous, and covered with inscriptions, which the learned have only recently been able to decipher. They are in the hieroglyphic, hieratic and demotic characters, in the Coptic or old Egyptian language, and have already served to throw much light on the imperfect accounts of historians, and to supply many deficiencies in our knowledge of Egyptian history. (See *Hieroglyphics*.) The Phœnician monuments, bearing inscriptions, are few. The language was employed on the medals of Alexander, and was carried to Carthage, Cadiz, &c., by this commercial people. Barthélemy (*Mém. de l'Acad. des Belles Lettres*, tom. xxxii), Swinton, Chishull, have written on this subject, but it is still involved in obscurity. The inscriptions on the ruins of Pasargadæ, Babylon and Persepolis (q. v.), are in the arrow-headed character, of which there are two kinds, the Persian and the Babylonian: the former consists of three sorts of characters, all of which are commonly used in the same inscription. The Persian inscriptions, so far as they have been deciphered, appear to contain merely names of the kings, with wishes for their welfare. The Babylonian characters are of two sorts, and are sometimes called *naïl-headed*, in distinction from the Persian. The little that is known relating to the arrow-headed characters may be found in Heeren's *Ideen*, i, 1; Hager's *Diss. on the Babylonian Inscript.* (London, 1801); Von Hammer's *Fundgruben des Orients*, iv, 4; Alexander's *Travels from India to England* (London, 1827). The ancient Arabic inscriptions are in the Cufic character (see *Cufic Writing*), and the old Hebrew are in the Samaritan character. Greek art was carried from its native soil into all the countries around the Mediterranean, by commerce and colonies, and, by the arms of Alexander and his successors, even into the remote East. The Greek language appears on a great number of monuments in this extensive region, written in different characters, according to the age of the inscription, and in different dialects in different countries. The Doric dialect is perceptible in the monuments of Dorian colonies, and so with the others. In this manner, where there are two cities

or artists of the same name, it may be determined to which the work of art should be attributed by the dialect of the inscription. The forms of the Greek letters underwent some changes, which must be attended to in the study of inscriptions: the absence or admission of certain letters (as H and Ω), the different forms of the sigma (Σ , C, or S), of the epsilon (as E or ϵ), of the O (as round or square, \square), of the lambda (as Δ or L), &c., may aid in determining the age of a monument. The early inscriptions are often from right to left, sometimes in the *boustrophedon* (q. v.), which was abandoned about the middle of the fifth century before Christ. (See the 8th vol. of the *Thesaur. Antiq. Græc.* of Gronovius; the works of Pococke, Chandler, and other travellers; Montfaucon's *Palæographia Græca*; *Mém. de l'Académie des Inscriptions.*) The Etruscan inscriptions, on vases and monuments, have occasioned much dispute among the learned. Niebuhr, in his Roman History, says, that the assertion of Dionysius, that the Etruscans spoke a peculiar language, deserves full credit, since it was, in his time, a living language; and it is fully confirmed by the inscriptions extant, in the words of which no analogy with the Greek or Latin can be detected; and he adds in a note, that, among all the Etruscan words of which explanations have been pretended, only two have been really explained. See, however, Lanzi's *Saggi di Lingua Etrusca* (Rome, 1789, 3 vols.); Gori's *Museum Etruscum*; and Inghirami's *Monument. Etruschi* (1826). From the Eugubian Tables, discovered in 1444, Buonarrotti, Gori and others endeavored to form an alphabet: the former thought he had discovered 24, the latter 16 letters. The Latin inscriptions are the most frequently met with. They are found on monuments of all descriptions; some very ancient ones are yet preserved. (See Grævius's *Thesaur. Antiq. Rom.*, vol. 4, and Fabricius's *Bibliotheca Latina*, lib. iv, c. 3.) Inscriptions are called *bilingual*, when the characters are taken from two different languages, as was sometimes done by the vanquished people, in compliment to their conquerors. Inscriptions are sometimes repeated in different languages, or in different characters, on the same monument; as, for instance, in the language of the province and in the Greek or Latin, in the times of the Greek and Roman empires. Some of the general collections of inscriptions are, Gruter's *Inscriptiones antiquæ. Cura Grævii* (Amsterdam, 1707,

2 vols., folio); Muratori's *Thesaurus Vet. Inscip.* (Milan, 1739, 4 vols.) Consult, also, the works of Selden, Prideaux, Chandler, and Maittaire on the Parian (Arundelian) marbles (q. v.); the *Archæologia Britannica* 1779 to 1822, 21 vols., 4to.; the *Mémoires de l'Académie des Inscriptions*; and the numerous works on particular countries, cities or collections. (See *Medal, Vase, Obelisks, Pyramids, &c.*)

INSCRIPTIONS, ACADEMY OF. (See *Academy.*)

INSECTIVORA; animals which live, or are thought to live, on insects. Divisions of this sort cannot be very exact. Some *insectivora* drink blood with delight, or eat grass occasionally, and some of the beasts of prey, whose principal food is larger game, are fond of flies. Among birds, the *insectivora* form a very numerous class.

INSECTS, in natural history. Under the head *Entomology*, an account is given of Latreille's system of this department of natural history. The following description of the characteristics of insects applies to the crustacea and arachnides, as well as to insects, strictly so called. Insects are not furnished with red blood, but their vessels contain a transparent lymph. This may serve to distinguish them from the superior animals, but it is common to them with many of the inferior; though Cuvier has demonstrated the existence of a kind of red blood in some of the vermes. They are destitute of internal bones, but, in place of them, are furnished with a hard external covering, to which the muscles are attached, which serves them both for skin and bones; they are likewise without a spine formed of vertebræ, which is found in all the superior classes of animals. They are furnished with articulated legs, six or more; this circumstance distinguishes them from all other animals destitute of a spine formed of vertebræ. A very great number of insects undergo a metamorphosis: this takes place in all the winged insects. They frequently change their skin in the progress of their growth. A very great number of insects are furnished with jaws placed transversely. The wings with which a very great number of insects are furnished, distinguish them from all other animals, which are not furnished with a spine composed of vertebræ. Insects are generally oviparous; scorpions and aphides, during the summer months, are viviparous. Insects have no nostrils; are destitute of voice; they are not furnished with a distinct heart, composed of ventri-

cle and auricle. Incubation is not necessary for hatching their eggs. Insects, like all other organized bodies, which form the animal and vegetable kingdoms, are composed of fluids and solids. In the four superior classes of animals, viz., mammalia, birds, reptiles and fishes, the bones form the most solid part, and occupy the interior part both of the trunk and limbs; they are surrounded with muscles, ligaments, cellular membrane, and skin. The matter is reversed in the class of insects; the exterior part is most solid, serving at the same time both for skin and bones; it encloses the muscles and internal organs, gives firmness to the whole body, and, by means of its articulations, the limbs, and different parts of the body, perform their various motions. In many insects, such as the crab, lobster, &c., the external covering is very hard, and destitute of organization; it is composed of a calcareous earth, mixed with a small quantity of gelatine, formed by an exudation from the surface of the body. As its great hardness would check the growth of the animal, nature has provided a remedy; all of these crustaceous insects cast their shell annually. The skin of most of the other insects is softer, and organized, being formed of a number of thin membranes, adhering closely to one another, and putting on the appearance of horn. It owes its greater softness to a larger proportion of gelatine. The muscles of insects consist of fibres formed of fasciculi; there are commonly but two muscles to produce motion in any of their limbs, the one an extensor, the other a flexor. These muscles are commonly attached to a tendon, composed of a horny substance, connected to the part which they are destined to put in motion. In most insects, the brain is situated a little above the œsophagus; it divides into two large branches, which surround the œsophagus, and unite again under it, from which junction a whitish nervous cord proceeds, corresponding to the spinal marrow of the superior animals, which extends the whole length of the body, forming in its course 12 or 13 knots or ganglions, from each of which small nerves proceed to different parts of the body. Whether insects be endowed with any senses different from those of the superior animals, cannot easily be ascertained. It appears pretty evident, that they possess vision, hearing, smell and touch; as to the sense of taste, we are left to conjecture; for we are acquainted with no facts by which we can prove that insects do or do not enjoy the sense of

taste. The eyes of insects are of two kinds; the one compound, composed of lenses, large, and only two in number; the other are small, smooth, and vary in number from two to eight. The small lenses, which form the compound eyes, are very numerous; 8000 have been counted in a common house fly, and 1700 in a butterfly. The far greater number of insects have only two eyes; but some have three, as the scolopendra; some four, as the gyrimus; some six, as scorpions; some eight, as spiders. The eyes of insects are commonly immovable; crabs, however, have the power of moving their eyes. That insects are endowed with the sense of hearing, can no longer be disputed, since frog-hoppers, crickets, &c., furnish us with undeniable proofs of the fact. Nature has provided the males of these insects with the means of calling their females, by an instrument fitted to produce a sound which is heard by the latter. The male and female death-watch give notice of each other's presence, by repeatedly striking with their mandibles against old wood, &c., their favorite haunts. Their ears have been discovered to be placed at the root of their antennæ, and can be distinctly seen in some of the larger kinds, as the lobster. The antennæ or feelers seem to be merely instruments of feeling, though some naturalists have thought them to be organs of tasting and smelling; and others, of a sense unknown to us. The amazing variety in the mouths of insects, is evident from the fact, that their whole classification, in the Fabrician system, is founded on it. That insects enjoy the faculty of smelling is very evident; it is the most perfect of all their senses. Beetles of various sorts, the different species of dermestes, flies, &c., perceive at a considerable distance the smell of ordure and dead bodies, and resort in swarms to the situations in which they occur, either for the purpose of procuring food, or laying their eggs. Insects feed on a great variety of substances; there are few things, either in the vegetable or animal kingdom, which are not consumed by some of them. The leaves, flowers, fruit, and even the ligneous parts of vegetables, afford nourishment to a very numerous class; animal bodies, both dead and alive, even man himself, is preyed on by many of them: several species of the louse, of the acarus, of the gnat, and the common flea, draw their nourishment from the surface of his body; the *pulex ulcerans* penetrates the cuticle, and even enters his flesh. A species of gadfly (*œstrus hominis*) deposits its

eggs under his skin, where the larvæ feed. Other caterpillars insinuate themselves into different cavities of his body. All the inferior animals have their peculiar parasitical insects, which feed on them during their life. There are some insects which can feed only on one species. Many caterpillars, both of moths and butterflies, feed on the leaves of some particular vegetable, and would die, could they not obtain this. There are others which can make use of two or three kinds of vegetables, but which never attain full perfection, except when they are fed on one particular kind; for example, the common silk-worm eats readily all the species of mulberry, and even common lettuce, but attains its greatest size, and produces most silk, when fed on the white mulberry. There are a great many which feed indiscriminately on a variety of vegetables. Almost all herbivorous insects eat a great deal, and very frequently; and most of them perish, if deprived of food but for a short time. Carnivorous insects can live a long while without food, as the carabus, ditiscus, &c. As many insects cannot transport themselves easily, in quest of food, to places at a distance from one another, nature has furnished the perfect insects of many species with an instinct, which leads them to deposit their eggs in situations where the larvæ, as soon as hatched, may find that kind of food which is best adapted to their nature. Most of the butterflies, though they flutter about, and collect the nectareous juice of a variety of flowers, as food for themselves, always deposit their eggs on or near to those vegetables which are destined, by nature, to become the food of their larvæ. The various species of ichneumon deposit their eggs in the bodies of those insects on which their larvæ feed. (See *Ichneumon*.) The sirex and sphex are likewise careful to deposit their eggs in situations where their larvæ, when hatched, may find subsistence. The sphex figulus deposits its eggs on the bodies of spiders which it has killed, and enclosed in a cell composed of clay. Some insects, at different periods of their existence, make use of aliment of very different properties; the larvæ of some are carnivorous, while the perfect insect feeds on the nectareous juice of flowers, e. g. sirex, ichneumon, &c. The larvæ of most of the lepidopterous insects feed on the leaves and young shoots of vegetables, while the perfect insects either take no food at all, or subsist on the sweet juice which they extract from flowers: indeed, the construction of their mouths

prevents them from taking any other than fluid food. We shall now refer to the functions of insects, beginning with respiration, which is the act of inhaling and exhaling the air into and out of the lungs. Mammalia, birds, and most of the amphibia, breathe through the mouth and nostrils. The air, when received into the lungs, is mixed with the blood, and imparts to it something necessary, and carries off something noxious. Some authors have asserted that insects have no lungs; but later experiments and observations show that no species is without them, or, at least, something similar to them; and, in many insects, they are larger in proportion to their bodies than in other animals. In most of them, they lie at or near the surface of the body, and send out lateral pores or tracheæ. The respiration of insects has attracted the attention of many naturalists; and it is found that insects do not breathe through the mouth or nostrils; that there are a number of vessels, for the reception of air, placed along on each side of the body, commonly called *spiracula*, which are subdivided into a number of smaller vessels, or bronchiæ; that the vessels, or tracheæ, which proceed from the pores on the sides, are not composed of a simple membrane, but are tubes formed of circular rugæ; that the spiracula are distinguishable, and are covered with a small scaly plate, with an opening in the middle like a button-hole, which is furnished with membranes, or threads, to prevent the admission of extraneous bodies. Insects are the only animals without vertebræ, in which the sexes are distinguished. Copulation is performed in them by the introduction of the parts of generation of the male into those of the female. All insects are either male or female, except in a few of the genera of the order *hymenoptera*, such as the bee, ant, &c., where individuals are to be found, which are neither male nor female, and, on that account, called *neuters*. Among the bees, the neuters form the far greater part of the community, and perform the office of laborers. Among the ants, the neuters are very numerous, and constitute the only active members of the society. It has been alleged, that these neuters are nothing but females, whose parts have not been developed for want of proper nourishment. Oliver, however, after strict examination, is disposed to think them really different, though he does not adduce facts sufficient to establish his opinion. The parts which distinguish the male from the female may be

divided into two classes, viz., 1. those which are not directly connected with generation; 2. those which are absolutely necessary for the purposes of generation. The circumstances which have no direct communication with generation, which serve to point out the distinction between the sexes, are the difference of size observable in the male and female; the brightness of the color in each; the form and number of articulations of the antennæ; the size and form of their wings; the presence or absence of a sting. The male is always smaller than the female; the female ant is nearly six times larger than the male: the female cochineal is from 12 to 15 times the size of the male; the female termes is 200 or 300 times the size of the male; the colors of the male are commonly much more brilliant than those of the female; this is particularly the case in lepidopterous insects; in some insects, the color of the male is totally different from that of the female: the antennæ of the male are commonly of a different form, and larger than those of the female: frequently the males are furnished with wings, while the females have none; the lampyris, coccus and blatta, and several moths, afford an example of this: the female bee is furnished with a sting, while the male is destitute of one: the males of some insects are furnished with sharp, prominent points, resembling horns, situated either on the head or breast, which are either not perceptible, or very faintly marked, in the female. The parts essential to generation afford the best distinguishing mark; in most insects, they are situated near the extremity of the rectum; by pressing the abdomen near to the anus, they may frequently be made to protrude; but the parts of generation are not always situated near the anus; in the spiders, they are situated in the feelers; in the libellula, the male organ is situated in the breast, while that of the female is placed at the anus. The eggs of insects are of two sorts; the first membranaceous, like the eggs of the tortoise and the other reptiles; the other covered with a shell, like those of the birds. Their figure varies exceedingly; some are round, some elliptical, some lenticular, some cylindrical, some pyramidal, some flat, some square; but the round and oval are the most common. The eggs of insects seldom increase in size, from the time they have been deposited by the parent till they are hatched: those of the tenthredo, however, and of some others, are observed to increase in bulk.

At first, there is nothing to be perceived in the eggs of insects but a watery fluid; after some little time, an obscure point is observable in the centre, which, according to Swammerdam, is not the insect itself, but only its head, which first acquires consistence and color; and the same author alleges, that insects do not increase in bulk in the egg, but that their parts only acquire shape and consistence. Under the shell of the egg, there is a thin and very delicate pellicle, in which the insect is enveloped, which may be compared to the chorion and amnios, which surround the fetus in quadrupeds. The little insect remains in the egg till the fluids are dissipated, and till its limbs have acquired strength to break the egg and make its escape; the different species of insects remain enclosed in the egg for very different periods; some continue enclosed only a few days, others remain for several months. The eggs of many insects remain without being hatched during the whole winter, and the young insects do not come forth from them till the season at which the leaves of the vegetables, on which they feed, begin to expand. When the insects are ready to break their prison, they commonly attempt to pierce the shell with their teeth, and form a circular hole, through which they put forth first one leg, and then another, till they extricate themselves entirely. Insects afford nourishment to a great number of the superior animals; many of the fishes, reptiles and birds, draw the principal part of their sustenance from that source. The immense swarms of different species of crab, which abound in every sea, directly or indirectly form the principal part of the food of the cod, haddock, herring, and a great variety of fishes. The snake, lizard, frog, and many other reptiles, feed both on land and aquatic insects. Gallinaceous fowls, and many of the small birds, &c., feed on insects. Swallows, indeed, feed entirely on winged insects. They afford food, likewise, to many of the mammalia, viz., to many species of the bat, to the ant-eater, &c., and even to man himself. Many species of crab, viz., lobster, common crab, shrimp, prawn, land-crab, &c., are reckoned delicacies. The larvæ of some coleopterous insects and locusts form part of the food of man. Insects, likewise, by consuming decayed animal and vegetable matter, which, if left to undergo the putrefactive process on the surface of the ground, might taint the atmosphere with pestilential vapors, preserve the air pure for the respiration of man and other ani-

mals. On the other hand, the injuries which they inflict upon us are extensive and complicated; and the remedies which we attempt, are often aggravations of the evil, because they are directed by an ignorance of the economy of nature. The little knowledge which we have of the modes by which insects may be impeded in their destruction of much that is valuable to us, has probably proceeded from our contempt of their individual insignificance. The security of property has ceased to be endangered by quadrupeds of prey, and yet our gardens are ravaged by aphides and caterpillars. It is somewhat startling, to affirm that the condition of the human race is seriously injured by these petty annoyances; but it is perfectly true, that the art and industry of man have not yet been able to overcome the collective force, the individual perseverance, and the complicated machinery of destruction which insects employ. A small ant, according to a most careful and philosophical observer (Humboldt), opposes almost invincible obstacles to the progress of civilization in many parts of the equinoctial zone. These animals devour paper and parchment; they destroy every book and manuscript. Many provinces of Spanish America cannot, in consequence, show a written document of a hundred years' existence. "What development," he adds, "can the civilization of a people assume, if there be nothing to connect the present with the past; if the depositories of human knowledge must be constantly renewed; if the monuments of genius and wisdom cannot be transmitted to posterity?" Again, there are beetles which deposit their larvæ in trees, in such formidable numbers, that whole forests perish beyond the power of remedy. The pines of the Hartz have thus been destroyed to an enormous extent; and at one place in South Carolina, at least 90 trees in every 100, upon a tract of 2000 acres, were swept away by a small, black, winged bug. Wilson, the historian of American birds, speaking of the labors of the ivory-billed wood-pecker, says, "Would it be believed that the larvæ of an insect, or fly, no larger than a grain of rice, should silently, and in one season, destroy some thousand acres of pine trees, many of them from two to three feet in diameter, and 150 feet high? In some places, the whole woods, as far as you can see around you, are dead, stripped of the bark, their wintry-looking arms and bare trunks bleaching in the sun, and tumbling in ruins before every blast." The

subterraneous larvæ of a species of beetle has often caused a complete failure of the seed-corn, as in the district of Halle in 1812. The corn-weevil, which extracts the flour from grain, leaving the husk behind, will destroy the contents of the largest storehouses in a very short period. The wire-worm and the turnip-fly are dreaded by every farmer. The ravages of the locust are too well known not to be at once recollected, as an example of the formidable collective power of the insect race. The white ants of tropical countries sweep away whole villages, with as much certainty as a fire or an inundation; ships even have been destroyed by these indefatigable republics, and the docks and embankments of Europe have been threatened by such minute ravagers.

INSOLVENCY. (See *Bankrupt*.)

INSTANCE. On the European continent, a court is said to be of the *first instance*, when it has original jurisdiction of a case; of the *second instance*, when it has appellate jurisdiction from a lower court; of the *third instance*, when it has appellate jurisdiction from courts of the second instance. In some cases, generally criminal, a court may be of the first or second instance, according to the place where the process was begun; for instance, if a man is tried in Prussia for a high crime, and found guilty, he appeals, and the case is sent to another criminal court, chosen by the government, which, in this case, is of the second instance; while, in the next case, perhaps, the situation of the two courts may be reversed. To *absolve ab instantia* means to absolve a person from an accusation, without carrying through the process.

INSTINCT (from the Latin *instinctus*); that impulse, produced by the peculiar nature of an animal, which prompts it to do certain things, without being directed, in acting thus, by reflection, and which is immediately connected with its own individual preservation, or with that of its kind. Thus the new-born duck hastens to the water, the infant sucks, without being taught to do so; all animals eat when they feel hunger, drink when they are thirsty, by instinct. All the instincts of animals are directed to the preservation either of the individual or of the genus. They appear in the selection of food, avoiding of injurious substances, taking care of their young, and providing for them before they are born; as the bird, for instance, builds its nest to receive its future progeny. The instinct of motion, and the opposite instinct, which compels

the bird, for instance, to remain on her eggs, at the period of incubation, are equally strong. The building of dwellings is, in the case of many animals, a highly curious exercise of instinct; as, for instance, in the case of the beaver and the bee. They are evidently actuated by instinct, as they always succeed the first time they attempt it. Certain instincts lead to certain changes; for instance, to migrating, or to coupling at certain times, to building nests, and expelling the young when they are fledged, and able to take care of themselves. Instinct sometimes misleads; as, for instance, the fly lays its eggs in the flower of the *stapelia hirsuta*, deceived by the smell of this plant, which resembles that of meat in a state of putrefaction. The young, in this case, perish from want of food. Two things are worthy to be remarked. Men often act from instinct, when least aware of it, and often explain actions in other animals, by instinct, in which they cannot be actuated by it, but in which memory, and the power of combination, must necessarily be supposed. Numberless anecdotes of dogs prove this. The intelligence of animals is an extremely interesting subject, and though there are several highly valuable works on it, yet it is far from having been thoroughly investigated.

INSTITUTE, THE NATIONAL. This learned body, which was organized after the first storm of the revolution, during which all the academies of learning and arts in France had perished, was formed by the decree of the 3d Brumaire of the year 4, from the *Académie Française*, the *Académie des Sciences*, and the *Académie des Belles Lettres et Inscriptions*. Its object was the advancement of the arts and sciences by continual researches, by the publication of new discoveries, and by a correspondence with the most distinguished scholars of all countries, and especially by promoting such scientific and literary undertakings as would tend to the national welfare and glory. The institute was composed of a number of members residing at Paris, and an equal number of associates (*associés*) in the different parts of the republic. Each class could also choose eight learned foreigners as associates. It was at first divided into three classes, each of which was subdivided into several sections. The first class embraced the physical and mathematical sciences, the second the moral and historical, and the third literature and the fine arts. The number of active members, exclusive of the *associés*, was limited to 144. The

national institute received, however, its final organization by a decree of the 3d Pluviöse of the year 11 (January 23, 1803). It was then divided into 4 classes—1. the class of the physical and mathematical sciences, consisting of 65 members; 2. the class of the French language and literature, consisting of 40 members; 3. the class of history and ancient literature, of 40 members; and 4. the class of the fine arts, with 28 members. In the last years of the imperial government, the title of the national institute was exchanged for that of the *imperial institute*. The restoration of the Bourbons gave rise to new changes in this learned body, which restored it, in some degree, to its original condition. A royal ordinance of March 21, 1816, first restored the former names of the classes, so that the name of *institute* was applied only to the whole body collectively. The same ordinance assigned the first rank to the *Académie Française*, as being the oldest; the next rank to the *Académie des Inscriptions et Belles Lettres*; the third to the *Académie des Sciences*; and the last to the *Académie des Beaux Arts*. These united academies were under the personal direction of the king, and each had an independent organization, and a free exercise of the powers committed to them. To each academy were attached 10 honorary members, who had merely the right of being present at the meetings. Such of the former honorary members and academicians as had returned with the court, became, as a matter of right, honorary members of their respective academies. A list of names, appended to the royal decree, determined the members. The *Académie Française* is well known to be charged with the composition of a French dictionary. Villernain, the successor of Fontanes, and Cuvier, are the most eloquent members. As every one who has brought a *vaudeville* on the stage with success, thinks himself entitled to a place among the 40 members of this class, these places afford the most fruitful subjects for squibs and satire. The *Académie des Inscriptions et Belles Lettres* has lately limited its members to 30. It has always been considered a great mark of distinction to be an *associé étranger* of this class. The number of corresponding members is unlimited. The most distinguished scholars, both in and out of Europe, are thus connected with the society. Committees of this academy superintend the erection of public monuments, and the preservation and description of those already

in existence. Sacy, Daunou, Caussin, Letronne, Boissonade, were chosen from this academy to continue the *Notices et Extraits des Manuscrits, de la Bibl. du Roy*. The editing of the *Journal des Savans*, to which the members of all the academies contribute, devolves principally on this academy. They have the distribution of prizes of considerable value. The *Académie des Sciences* is divided, as formerly, into the two principal departments of the physical and mathematical sciences, and retains most of its earlier regulations, made in the time of the republic. The number of its *associés étrangers* is limited to 10. Cuvier is perpetual secretary of the physical branch, Fourier of the mathematical. The two secretaries are not confined to a particular section; they belong to all. The *Académie des Beaux Arts* has five sections. A committee of this academy is charged with the publication of a dictionary of the fine arts. The annual changes which take place in the academies may be learned from the calendar called *Institut Royal de France*, published by Firmin Didot, printer to the institute.

INSTITUTIONES. (See *Corpus Juris, and Civil Law*.)

INSTRUMENT, in music; any sonorous body, artificially constructed for the production of musical sound. Musical instruments are divided into three kinds—wind instruments, stringed instruments, and instruments of percussion. Of the stringed instruments among the ancients, the most known are the lyre, psalterium, trigonium, simmicium, epanoron, &c. The principal wind instruments were the tibia, fistula, tuba, cornu, and lituus; those of percussion, the tympanum, cymbalum, crepitaculum, tintinabulum, and crotalum.

INSTRUMENTAL MUSIC; music produced by *instruments*, as contradistinguished from *vocal music*. The term *instrumental* is particularly applied to the greater compositions, in which the human voice has no part. The first instrument invented was probably the pipe or flute. An idle shepherd might very naturally, from accident, or in imitation of the effects of the wind, blow through a simple reed, and thus invent the pipe, from which the flute would readily originate. The pipe is, in fact, found among many savages. The invention of stringed instruments, as they are more artificial, is of later origin. The instrumental music of the Greeks was confined to a few instruments, among which the flute, the cithara, the sackbut, though not precisely like those instruments

among the moderns, were the most important. The violin was invented in the middle ages, and soon became the principal instrument, taking place above the flute, though the latter is of much more ancient origin, because the playing on a stringed instrument is less fatiguing, and the tone of the violin is more distinct from the human voice, and, therefore, better fitted to be used with it; besides, the instrument permits much more perfect execution. Until the middle of the last century, the Italian composers used no other instruments in their great pieces, than violins and bass-violis; at that time, however, they began to use the hautboy and the horn; but the flute has never been much esteemed in Italy, particularly in music exclusively instrumental. These were the only wind instruments in Italy, used in instrumental music, until the end of the last century; and even to this day, the Italians use wind instruments much less than the Germans, and particularly the French. Since Mozart, every instrument has been used, which appeared adapted to answer a particular purpose. This is the cause of the fewness of the notes in the Italian, and of their great number in German, and their excess in the modern French scores. In general, symphonies and overtures, solos, duets, terzetos, quartettos, quintettos, &c., sonatas, fantasias, concerts for single instruments, dances, marches, &c., belong to instrumental music.

INSURANCE is a contract, whereby, for a stipulated consideration, called a *premium*, one party undertakes to indemnify another against certain risks. The party undertaking to make the indemnity is called the *insurer* or *underwriter*, and the one to be indemnified, the *assured* or *insured*. The instrument, by which the contract is made, is denominated a *policy*; the events or causes of loss insured against, *risks* or *perils*; and the thing insured, the *subject* or *insurable interest*. *Marine* insurance relates to property and risks at sea; insurance of property on shore against fire, is called *fire* insurance; and the written contracts, in such cases, are often denominated *fire* policies. Policies on lives are another description of this contract, whereby a party, for a certain premium, agrees to pay a certain sum, if a person, to whose life it relates, shall die within a time specified. These policies, however, usually make an exception of death by suicide. There was a kind of insurance in use, among the Greeks and Romans, called *bottomry* or *respondentia*,

which is, where the owner of a vessel or goods, borrows money upon bottomry (q. v.) upon the vessel, or upon respondentia on the goods, for a certain voyage, agreeing, that if the ship or goods arrive at a certain port, the money shall be repaid, and also interest, exceeding the legal rate; but if lost by the risks specified in the bond, before arriving at the port named, the lender is to lose the money loaned. This risk of losing the whole capital, is the cause of the excess of interest allowed in case of the arrival of the ship or goods; and it is called *marine interest*, which ought to be equal to the common rate of interest, added to the rate of premium, for insuring the ship or goods for the same voyage against the same risks. This sort of contract was anciently in use, and, as the laws then gave less security, or, at least, as credit and confidence were not so widely diffused, and correspondance was less extensive among merchants, it was usual for the lender to send some person with the property, to receive repayment of the money loaned and the marine interest, at the port where the risk terminated. In modern times, it is not usual to send any person with the property, who would be of no service during the voyage; and, at its termination, some agent of the lender, at the port of arrival, if he is not there himself, looks after his interest. The wide extension of correspondance, among merchants of all parts of the world, in modern times, gives a facility for this purpose, and renders the execution of this, as well as other commercial contracts, more economical, and, at the same time, more secure. But contracts of insurance, strictly so called, are of modern invention; and their importance, in relation to commerce, is scarcely inferior to that of bills of exchange. Every merchant is liable to losses and reverses, by the change of the markets. The risks of this description may, however, be calculated upon with some degree of probability; but those of fire, the perils of the seas, or capture, cannot be so well estimated; and, when they come, they would, in many cases, bring ruin upon the merchant, if it were not for the system of insurance, the object of which is, to apportion the losses from these disasters among all those whose property is exposed to the same hazards. If, for instance, all persons engaged in trading were to enter into a general agreement to contribute for the losses of each other, occasioned by those casualties, in the proportions of the amounts that they should respectively

have at risk, every individual would then only run the risk of the proportion of losses occurring upon the general aggregate of property at risk. But as such a general combination would be complicated, and practically inconvenient, a very simple system is devised, by means of insurance, for effecting the same object; for one person—the underwriter—agrees to take upon himself those risks, for a hundred merchants, more or less, for a certain premium on each risk, calculating that the premiums on the fortunate adventures will compensate him for the losses he may incur on those which are unfortunate, and leave him some surplus, as a compensation for his time and trouble; and a little experience will enable him to calculate the chances with very considerable accuracy. The result accordingly is, that all the persons who procure their property to be insured by him, in effect, mutually contribute for each other's losses, by the bargain of each with the common receiver of the contributions of all. This contract was subjected to a system of definite rules, much earlier in Italy and France than in England; and as the contract is the same in principle, and very similar in form in different countries, the rules of construction adapted to it in one country, are equally applicable in another. The system of rules collected in the French ordinance of the marine in the year 1681, and which had already, in general, become established in France, Italy and the Netherlands, is still in force, and daily applied throughout the commercial world, not only in Europe, but also in America. But it was late before these principles of insurance were intimately incorporated into the law of England. Until the time of lord Mansfield's becoming chief-justice of the court of king's bench in England, about the middle of the 18th century, the law of insurance was in a very rude state in that country. It was, before that time, the more general practice to make what were called *wagering policies*, in which one party agreed, for a certain premium, to pay the other a certain sum, in case a particular vessel should not arrive at a certain port of destination, on account of certain perils; without any question being made whether the party insured had any interest in the ship or cargo; so that, in addition to the contracts of insurance against real loss, many contracts of the above sort were made by persons who had no interest whatever in the property to which the contract related. These contracts of insurance, in the case

of persons really interested in the property, were a very imperfect indemnity, since they only extended to the case of a defeat of the voyage; whereas, great damage is often sustained by the ship or cargo, notwithstanding they may both arrive at the port of destination. But, at about the period already mentioned, Magens, a merchant, who had removed from Hamburg to London, published his very elaborate work on insurance, in the latter place, containing all the laws and regulations of the different commercial countries of the continent, on this subject, and presenting its leading doctrines, in relation to partial losses and general averages, and giving a great number of examples of adjustments of losses, of both descriptions. Lord Mansfield, at about the same time, expelled from the administration of this branch of law the narrow, quibbling and technical doctrines with which it had been previously too much infested. The foundation was then laid for that magnificent and truly scientific superstructure of legal principles and practical rules, which has been the work of the joint labors of the English and American jurists, from that period down to the present day. The courts of the U. States have contributed their full share towards the formation of the admirable system by which the commerce of the world is now protected and promoted; and instances might readily be referred to, of discussions and opinions on this subject in the American courts, which, in learned research, liberality of views, scientific principles, and logical precision, will not suffer by a comparison with those of any other country. This contract, considered as one of indemnity,—and as such only it ought always to be regarded, and by no means confounded with gambling,—requires, in the first place, a subject; something must be at risk, and the thing so at risk must be described in the contract; and no party can be injured, unless he has an interest in the subject which he is liable to lose, or in respect to which he is liable to suffer by the perils insured against; and the contract must specify against what perils or risks the underwriter undertakes to make indemnity; and the party insured must, at the time of making the contract, state, fairly and honestly, all the material circumstances within his own private knowledge, which may enable the underwriter to form an estimate of the risk. This is peculiarly a contract, in which the assured is bound to fairness and good faith in effecting it, and the un-

derwriter to liberal promptness in complying with his stipulation to make indemnity.

INSURRECTION. (See *Revolution.*)

INTAGLIOS; engraved gems. (See *Gem Sculpture.*)

INTEGRAL. (See *Calculus.*)

INTEMPERANCE. (For some facts on this subject, see the article *Temperance.*)

INTENSENESS is the state of being raised or concentrated to a great degree. A *verbum intensivum*, in grammar, is a verb which expresses increased force; as, *facesso*, I do earnestly, from *facio*, I do; *petisso*, I seek earnestly, from *peto*, I seek. The German *betteln*, to beg alms, may, perhaps, be considered as the intensive form of *bitten*, to ask, unless it be considered to denote properly a repetition of the act of asking, in which case it will belong to the class of *verba frequentativa*, such as *factito*, I do repeatedly; *lectito*, I read often.

INTERDICT; an ecclesiastical censure in the Catholic church, the effect of which, taken in its most extended sense, is, that no kind of divine service is celebrated in the place or country under the sentence; the sacraments are not administered, the dead not buried with the rites of the church. This interdict is called *real* or *local*, whilst the personal interdict regards only one or more persons. We shall here speak of the former. Even Catholic writers admit that the interdict has been often abused for interested purposes, and has produced licentiousness in the countries and provinces subjected to it, by depriving them of religious service for a length of time. (See the (Catholic) *Dictionnaire de Théologie*, Toulouse, 1817, article *Interdict.*) And no one, acquainted with history, can deny that interdicts have been productive of rebellion and all kinds of disorder; they served, however, in the barbarous age of modern Europe, as a check against the power of the monarchs. It is a mistake to suppose that Gregory VII (q. v.) was the inventor of this mighty engine of ecclesiastical power. It can be proved to have existed before his time; but it is true that he used it oftener and more powerfully than any of his predecessors. The 11th century was preëminently the century of interdicts. Adrian IV laid Rome itself under an interdict, for the purpose of compelling the senators to expel Arnold of Brescia and his followers. Innocent III laid France under an interdict in 1200, and England in 1208. (See *Philip Augustus*, *John*, and *Innocent.*) Popes or

bishops sometimes mitigated the rigor of the interdict. Thus we read in the Chronicle of Tours, that the viaticum and baptism were allowed to be administered during the interdict, under which France was laid, as above-mentioned, and which lasted nine months. Innocent III finally permitted preaching and confirmation to take place during this period, and even the administering of the eucharist to crusaders and foreigners. And Gregory IX, about 1230, on account of the "great scandal" caused by the interdicts, permitted mass to be said once a week, without ringing the bells, and with the doors closed. Boniface VIII (1300) ordered the mass to be said without singing, every day, with closed doors, except on Christmas, Easter, Pentecost and Assumption, when ringing the bells, singing and open doors were allowed. Magdeburg was four years under an interdict, because the archbishop of the city had been murdered. John XXII took off the interdict by a bull. Interdicts were gradually recognised to be inconsistent with the spirit of the time; and, when Paul V laid Venice under an interdict in 1606, the churches were not closed, nor divine service interrupted, and only a minority of the bishops acknowledged it. In the beginning of the same century, some interdicts, pronounced by bishops, excited much attention. It was not unfrequent, in the middle ages, for princes to request bishops to lay the territories of their vassals under an interdict. The interdict must be announced, like the excommunication, in writing, with the causes, and is not to be imposed until after three admonitions. The penalty of disobedience to an interdict is excommunication. Writers of the Gallican church say that the pope has no right to lay France under an interdict, and the parliaments refused to register them. Interdicts are not to be confounded with the simple *cessatio a divinis*, or the disuse of religious ceremonies, which takes place when a church has been polluted, e. g., by a murder committed in it.

INTEREST is the allowance made for the loan or forbearance of a sum of money, which is lent for, or becomes due at, a certain time; this allowance being generally estimated at so much per cent. per annum, that is, so much for the use of \$100 for a year. Interest is either *simple* or *compound*. *Simple interest* is that which is allowed upon the principal only, for the whole time of the loan or forbearance. The money lent, or forborne, is called the *principal*; the sum paid for the use of it,

the *interest*. The interest of \$100 for one year, is called the *rate per cent.*, and the sum of any principal and its interest, together, the *amount*.—*Compound interest* is that which arises from any sum or principal in a given time, by increasing the principal, at fixed periods, by the interest then due, and hence obtaining interest upon both interest and principal. The accumulation of money, when placed at compound interest, after a certain number of years, is exceedingly rapid, and in some instances appears truly astonishing. One penny, put out at 5 per cent. compound interest, at the birth of Christ, would, in 1810, have amounted to a sum exceeding in value 357,000,000 of solid globes of standard gold, each in magnitude as large as this earth! (the exact number of globes, according to this computation, is 357,474,600); while, at simple interest, it would have amounted only to 7s. 7½d.

INTERIM (of Augsburg). After the overthrow of the Smalcaldic league, the despotic emperor Charles V, in order to place Germany in its former condition, in regard to religion as well as politics, issued a decree, to be observed until a general council should be assembled. This decree was therefore called the *interim*, and settled, *pro tem.*, the constitution, the doctrines and discipline of the church in Germany. At the diet of Augsburg (1548) it received the force of a law of the empire. Nothing was conceded to the Protestants but the cup in the Lord's supper, and the marriage of priests; in every other respect, the doctrines and ceremonies of Catholicism, from which they had been free for more than 20 years, were to be restored. The Protestants, however, contrived to gain time by negotiations and compliances, until the treaty of Passau (1552) and the peace of Augsburg (1555) secured to them complete religious freedom. (See *Peace, Religious*.)

INTERLUDE; a piece of music, a dance, or a short dramatic scene, generally between two performers of different sexes, exhibited between the acts of a serious opera, to vary the entertainment. The interlude is not an invention of the moderns; the ancients were acquainted with certain short pieces, loosely connected, which served to make an easy transition from one play to another, and to occupy the interval between the two. At present, the term *interlude*, or *intermezzo*, is applied principally to small comic operas, written for one, or at most for two persons, but not connected, in any way, either with the play which precedes, or that which fol-

lows. On account of the very limited number of persons in the interlude, little more is required of such pieces than humor and comic power. According to Artega, modern interludes were at first madrigals, which were sung between the acts by several voices, and were connected with the play. One of the oldest and most beautiful is *Il combattimento d'Apolline col Serpente*, by Bardi. But these madrigals soon lost their primitive form, and represented some action.

INTERMENT. (See *Funeral Rites*.)

INTERNUNTIVUS; the messenger or representative of the pope, sent to small foreign courts and to republics. The papal ambassador to emperors and kings is called *nuntius*. (See *Nuncio*.) The ordinary Austrian ambassador at Constantinople is also called *internuntius*.

INTERPOLATION, in algebra, signifies the finding of an intermediate term in a series, its place in the series being given. There are analytic formulas for the execution of interpolations.—In philological criticism, *interpolation* signifies the insertion of spurious passages in a work. In printed texts, suspected passages are often enclosed in brackets.

INTERPRETATION (from the *Latin*); the explanation of the true meaning of an author or instrument. (For the interpretation of the Scripture, see *Exegesis*; for interpretation in politics, see *Construction*.) On the continent of Europe, if a law is interpreted by the legislative power, it is called *interpretatio authentica*; if by the unwritten usage, *interpr. usualis*; if in a scientific way, *interpr. doctrinalis*, which may be *interpr. grammatica*, if the meaning is found out from the words according to grammatical rules, or *interpr. logica*, if the meaning is found by internal reasons, or *interpr. critica*, if obtained by correcting the text. The *interpr. logica* is called *extensiva*, if it extends the law beyond the literal meaning of the words, or *restrictiva*, if it restricts the application of the law to fewer cases than the words would imply, and *declarativa*, if it settles vague expressions. In the interpretation of laws, it is of the first importance to ascertain the meaning of the lawgivers; the intention of the person who drew up an instrument in the nature of a contract, is not so decisive, because there the intention of the party with whom the contract was made, is equally important. Furthermore, the meaning which words bore at certain periods, is important in the explanation of old laws, and a knowledge of local usages is often essential for interpretation. In

former times, laws and instruments were drawn up with a profusion of words, to avoid, as far as possible, leaving any thing to construction; but experience has proved this view to be erroneous, for nothing is clearer than the simplest language; and, though there will always be room left for interpretation, except in mathematics, yet this increases with the profusion of words and the endeavor to embrace every detail.

INTERREGNUM. (See *Germany*.)

INTERVAL; the difference in point of gravity or acuteness between any two sounds. Taking the word in its more general sense, we must allow that the possible *intervals* of sound are infinite; but we now speak only of those intervals which exist between the different tones of any established system. The ancients divided the *intervals* into simple or uncomposite, which they call *diastems*, and composite intervals, which they call *systems*. The least of all the *intervals* in the Greek music was, according to Bacchius, the enharmonic diesis, or fourth of a tone; but our scale does not notice so small a division, since all our tones concur in consonances, to which order only one of the three ancient genera, viz. the diatonic, was accommodated. Modern musicians consider the *semitone* as a simple interval, and only call those composite which consist of two or more semitones: thus from B to C is a semitone, or simple interval, but from C to D is two half tones, or a compound interval.

INTERVENTION, in politics; a word which has been used, particularly since the congresses of Troppau, Laybach and Verona (see *Congress*, and *Holy Alliance*), to express the armed interposition (*intervention armée*) of one state in the domestic affairs of another. The right of armed intervention has never been so distinctly pronounced, and acted upon, as in modern times, since the congress of Vienna. It was a natural consequence of the holy alliance, and the congresses of rulers, or their representatives, assembled to prop the pillars of despotism. (See *Italy*, *France*, since 1819, *Naples*, and *Spain*.) Such armed interventions as have lately taken place in Europe arise from the fellow-feeling of sovereigns, who claim the right of assisting each other against their subjects, and directly contravene the right of independent development which belongs to the character of a nation. Yet to deny the right of forcible intervention *in toto*, would be to condemn the interference of the powers of Europe to save the

Greeks from extirpation; and we might inquire, who, if the mad tyranny of don Miguel were to continue for years, and the Portuguese nation to be cruelly oppressed by a military force, would blame a foreign power for interfering? Or if the French, instead of actually conquering Algiers, had merely destroyed the government of the piratical soldiery, for the sake of liberating the natives, whom they oppressed, who could blame such an intervention? The works of Fiévée (*De l'Espagne et des Conséquences de l'Intervention Armée*, 3d edit., Paris, 1823), of Bignon (*Du Congrès de Troppau*, Paris, 1821), and *Les Cabinets et les Peuples depuis 1815, jusqu'à la Fin de 1822*, 3d edit., Paris, 1823), of De Pradt, &c., as well as the important debates on the subject of the French war of intervention in Spain, in both the French chambers, and in the British parliament, 1823, have exhausted the subject. The first statesmen of France and England then exerted themselves to throw light on the doctrine of armed intervention, which had already been applied to the Poles, treating it both in its general principles and in its application to particular cases. Among the state papers relating to the right of intervention according to the latest principles, the following are particularly important:—the declaration of the English minister, lord Castlereagh, of the 19th January, 1821, and the circular of Verona, 14th December, 1822. With regard to the application of this doctrine, by the European powers, to the Spanish American colonies, the U. States and England declared themselves so categorically, in 1824, that no congress of the sovereigns was held on that subject. The U. States are the power which acts most implicitly upon the principle of non-intervention. (See *Independence*.) Recently, the interest of most of the European monarchs, which induced them to pronounce at Laybach the right of armed intervention, has prompted them to deny it in the protocol of the five great powers, issued at London, in 1831, denouncing foreign intervention in the affairs of Belgium; and a similar declaration is expected in regard to Poland; the reason of which is, that the absolute monarchs at present see clearly how much the security of their thrones would be jeopardized by a war.

INTESTINE (*intestinum*, from *intus*, within). The convoluted membranous tube, that extends from the stomach to the anus, receives the ingested food, retains it a certain time, mixes with it the bile and pan-

creatic juice, propels the chyle into the lacteals, and covers the feces with mucus, is so called. The intestines are situated in the cavity of the abdomen, and are divided into the small and large, which have, besides their size, other circumstances of distinction. The small intestines are supplied internally with folds, called *valvulae conniventes*, and have no bands on their external surface. The large intestines have no folds internally; are supplied externally with three strong muscular bands, which run parallel upon the surface, and give the intestines a saccated appearance; they have also small fatty appendages, called *appendiculae epiploicae*. The first portion of the intestinal tube, for about the extent of twelve fingers' breadth, is called the *duodenum*; it lies in the epigastric region, makes three turnings, and, between the first and second flexure, receives, by a common opening, the pancreatic duct, and the *ductus communis choledochus*. It is in this portion of the intestines that chylication is chiefly performed. The remaining portion of the small intestines is distinguished by an imaginary division into the *jejunum* and *ileum*. The *jejunum*, which commences where the *duodenum* ends, is situated in the umbilical region, and is mostly found empty; hence its name: it is every where covered with red vessels, and, about an hour and a half after a meal, with distended lacteals.—The *ileum* occupies the hypogastric region and the pelvis, is of a more pallid color than the former, and terminates by a transverse opening into the large intestines, which is called the *valve of the ileum*, *valve of the cæcum*, or the *valve of Tulpius*. The beginning of the large intestines is firmly tied down in the right iliac region, and, for the extent of about four fingers' breadth, is called the *cæcum*, having adhering to it a worm-like process, called the *processus caeci vermiformis*, or *appendicula caeci vermiformis*. The great intestine then takes the name of *colon*, ascends towards the liver, passes across the abdomen, under the stomach, to the left side, where it is contorted like the letter S, and descends to the pelvis; hence it is divided, in this course, into the *ascending portion*, the *transverse arch*, and the *sigmoid flexure*. When it has reached the pelvis, it is called the *rectum*, from whence it proceeds in a straight line to the anus. The intestinal canal is composed of three membranes, or coats; a common one from the *peritoneum*, a muscular coat, and a villous coat, the *villi* being formed of the fine terminations of arteries and nerves, and the origins of lac-

teals and lymphatics. The intestines are connected to the body by the mesentery; the *duodenum* has also a peculiar connecting cellular substance, as have likewise the colon and rectum, by whose means the former is firmly accreted to the back, the colon to the kidneys, and the latter to the *os coccygis*, and, in women, to the vagina. The remaining portion of the tube is loose in the cavity of the abdomen. The arteries of this canal are branches of the *superior and inferior mesenteric*, and the *duodenal*. The veins evacuate their blood into the *vena portæ*. The nerves are branches of the eighth pair and intercostals. The lacteal vessels, which originate principally from the *jejunum*, proceed to the glands in the mesentery.

INTONATION, in music, relates both to the consonance and to the strength or weakness of sounds. Intonation not only includes the act of tuning, but the giving to the tones of the voice or instrument that occasional impulse, swell and decrease, on which, in a great measure, all expression depends. A good intonation is one of the first qualifications in the higher walks of execution.—In church music, those antiphonies are called *intonations*, which are first sung by the priest, and then responded by the choir or the congregation; also the short sentence, mostly taken from the Bible, which the minister sings before the collect, and which is responded by the choir or community. Such are the *Gloria* (q. v.), "The Lord be with you," &c.

INTOXICATION; the state produced by the excessive use of alcoholic liquids. It comes on gradually, and several stages may be noticed in its progress. The first is the condition expressed by the phrase *warned with wine*. In this stage, the circulation of the blood becomes somewhat more rapid, and all the functions of the body are exercised with more freedom. The excitement, however, is not so great as to produce a surcharge of blood in the head or lungs. In this state, some of the powers of the soul seem to act more freely; the consciousness is not yet attacked; the fancy is more lively; the feeling of strength and courage is increased. In the second stage, the effect on the brain is more decided. The peculiarities of character, the faults of temperament which, in his sober moments, the individual could control and conceal, manifest themselves without reserve; the secret thoughts are disclosed, and the sense of propriety is lost. In the next degree, consciousness is still more weakened; the balance of the

body cannot be kept, and dizziness attacks the brain. In the next degree, the soul is overwhelmed in the tumult of animal excitement; consciousness is extinguished; the lips utter nothing but an incoherent babble; the face becomes of a glowing red; the eyes are protruded; sweat streams from the pores; and the victim of intoxication falls into a sleep resembling the stupor of apoplexy. (For some further remarks on this subject, see the article *Temperance*.)

INTRENCHMENT; any work that fortifies a post against the attack of an enemy. The word is generally used to denote a ditch or trench with a parapet. Intrenchments are sometimes made of fascines with earth thrown over them, of gabions, hogsheads, or bags filled with earth, to cover the men from the enemy's fire. (See *Retrenchment*.)

INTRIGUE; an assemblage of events or circumstances, occurring in an affair, and perplexing the persons concerned in it. In this sense, it is used to signify the nodus or plot of a play or romance, or that point wherein the principal characters are most embarrassed through artifice and opposition, or unfortunate accidents and circumstances.

INTROITO; a passage of the fifth verse of the 42d Psalm, with which the Catholic priest, at the foot of the altar, after having made the sign of the cross, begins the mass; whereupon the servitor answers with the rest of the verse; after which the whole Psalm is recited alternately by the priest and the servitor. In masses for the dead, and during Passion week, the Psalm is not pronounced.

INTUITION (from the Latin *intueor*, I look steadfastly at, gaze upon; in German philosophy, *Anschauung*), would mean, according to its etymology, in its narrowest sense, an image in the mind, acquired directly by the sense of sight. In the English use of the word, it is confined to mental perception, and signifies the act whereby the mind perceives the agreement or disagreement of two ideas, immediately by themselves, without the intervention of any other; in which case, the mind perceives the truth, as the eye does the light, merely by being directed towards it. Thus the mind perceives that white is not black, that three are more than two, and equal to one and two. This part of knowledge, says Locke, is irresistible, and, like the sunshine, forces itself immediately to be perceived, as soon as ever the mind turns its view that way. It is on this intuition that all the certainty and evidence of our other knowledge de-

pend; this certainty every one finds to be so great, that he cannot imagine, and therefore cannot require, a greater. The German *Anschauung*, which literally signifies the same as *intuition*, is used to signify any notion directly presented by an object of sense. The transcendental philosophy acknowledges also intuitions which live in us (distinct from ideas obtained by reasoning), in consequence of the direct perception of the internal sense, as the intuition of the Divine. Kant distinguishes empiric intuitions (those conveyed by the senses from external objects), and pure intuitions (*reine Anschauungen*), or intuitions *a priori*, which are the basis of the former; for instance, *space* and *time*: as nothing can be perceived by our senses except either in space or time, our notions of these must precede the empiric intuitions.

INVALIDS; soldiers and officers, who are disabled for foreign service by wounds, disease or age, and who are generally maintained for life in public establishments (hospitals), at the public expense. The Athenians had a law, providing for the public maintenance of persons disabled in war. The Romans also made some, though small, provision for invalids. At a later period, they were taken care of in the monasteries. Philip Augustus of France first formed the plan of an hospital for invalids. But, as pope Innocent III would not permit this institution to be placed under the direction of the bishop, the king relinquished the plan. Louis XIV was the first who carried this design into execution. Between 1671 and 1679, he erected a splendid hospital at Paris, in the suburb of St. Germain. A church, a department for the sick, a governor, and other officers, are attached to it. Guards are stationed, and all other forms observed which are customary in fortified posts. A soldier must have served ten years, to be received into this hospital on account of poverty or infirmity. The invalids who mount guard are the only ones who bear arms. This institution suffered very much at the commencement of the revolution; but, during the imperial government, it was put in a better condition than ever. The architect of the hospital was Bruant. It is composed of five courts surrounded by buildings. A vast esplanade, bordered by rows of trees, and decorated with a fountain, gives the principal *façade*, towards the Seine, a noble perspective. The *hôtel* has a library of 20,000 volumes; it is capable of containing 7000 men, and is governed by a marshal of France. The church is considered a *chef-d'œuvre* of French architect-

ture; its dome supports a lantern, which is surmounted by a cross 308 feet high. From the dome were formerly suspended 3000 colors, taken from different nations; but they were taken down and burnt by the invalids, at the time when the allies entered Paris, that they might not be retaken. Works in statuary and painting, by Lafosse, Boullongne, Coypel, Coustou, Coysevox, &c., adorn the ceilings, niches, and other parts of the buildings. Frederic the Great, in 1748, built the hospital at Berlin, with the inscription *Læso et invicto militi*. The British marine hospital, at Greenwich, is the first institution of this kind.

INVENTION, in science, is distinguished from *discovery*, as implying more creative combining power, and generally signifies the application of a discovery to a certain purpose. But the distinction is often very nice, and it is difficult, in many cases, to say which word is most suitable. Every invention includes a discovery. When Archimedes exultingly exclaimed, *Εὕρηκα* (I have found it), after he had discovered, in the bath, that his body, in the fluid, displaced an amount equal to its own bulk, he *discovered*; but he *invented* when he applied the hydrostatic law, thus discovered, to determining the specific gravity of different substances. Inventions owe their origin, as discoveries do, either to chance, to some happy idea suddenly striking the mind, or to patient reflection and experiment. Many inventions belong to the two former heads. Of the third class of inventions, late years afford many instances, owing to the great attention which has been paid to the natural sciences. As man, in modern times, is always inclined to consider that which is nearest him the most important, he generally considers the inventions of his age as far surpassing those of other times; but the study of history teaches us more modesty. The invention of the screw, of the wheel, of the rudder, of the double pulley, may be compared with any modern inventions in mechanical science, and could not, moreover, have been struck out at once by chance. The history of inventions is one of the most interesting branches of historical sciences, exhibiting, in a striking light, the stages of progress and decline in human activity, and the great variety of motives which have actuated different ages. G. Ch. A. Busch has published a Manual of Inventions, 12 vols., (Eisenach, 1802 to 1822, in German). Beckmann's History of Inventions (Leipzig, 1780—1805) has been translated into English, 3 vols.

INVENTION OF THE CROSS. The Roman Catholic church celebrates a feast, May 3, in honor of the finding of the cross on which Christ was executed. The search was made by the order of St. Helena, mother of the emperor Constantine, A. D. 326, and the cross was said to have been found under the ruins of Calvary. The story is told by St. Cyril.

INVERSION (from the *Latin*), literally, *turning in*, is a word variously used. In grammar, it is contradistinguished from *construction*, and means the arrangement of words according to the order in which the ideas follow in the writer's mind, and not according to the usual grammatical construction. The inversion is regulated by the object of the writer or speaker. The French language is the most confined in this respect, and has made the natural construction its first law of arrangement. The Greek and Latin, on the contrary, are extremely free in the use of inversion, and, under certain circumstances, can use almost any order of words. The German is not so free as the Greek, but much freer than the French. Inversion seems necessary for the perfection of a language, though it leads to many aberrations from good sense. As a figure in rhetoric, inversion is used to direct the attention to a particular point, without changing the meaning, as, for instance, 'My peace I give to you,' or 'The palm of victory he soon hath gained, the faithful warrior.'—Two numbers, powers or quantities are said to be in an inverse proportion, if one diminishes as the other increases; for instance, the fleetness and the power of a horse are in an inverted proportion.—The term is also used, in tactics, to denote the disordered arrangement of a battalion, when the platoons composing it stand in a reversed order. When the platoon which usually stands on the extreme right becomes, by a manœuvre, the extreme left, the second platoon from the right becoming the second from the left, and so on, then the man who before stood at the right extremity of the platoon should properly stand at the left; but if, instead of so doing, he still stands at the right, the position of the battalion is inverted. In the following series,

8 7 6 5 4 3 2 1
q...p|o....n|m....l|k....i|h....g|f....e|d....c|b....a,
 let *a, c, e, g, i, l, n, p,* be the men on the right of their respective platoons, when the battalion stands regularly drawn up: then the following order would represent the battalion inverted, thus:

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1 2 3 4 5 6 7 8
b....a|d....c|f....e|h....g|k....i|m....l|o....n|q....p.

Here platoon 1 stands on the left wing, yet *a* stands on the right of his platoon. In both cases, the line is supposed to face the same way.

INVESTITURE, in the feudal law, was the open delivery of a feud by a lord to his vassal, thus, by external proof, affording evidence of property. To use the words of Blackstone, "Investitures, in their original rise, were probably intended to demonstrate, in conquered countries, the actual possession of the lord, and that he did not grant a bare litigious right, but a peaceable and firm possession. At a time when writing was seldom practised, a mere oral gift, at a distance from the spot that was given, was not likely to be long or accurately retained in the memory of bystanders who were very little interested in the grant." For this reason, investiture was performed by the presentation of some symbol to the person invested, as a branch of a tree, &c. In the primitive church, after the election of a bishop, and his consecration, the early Christian emperors claimed a right of confirmation. The Gothic and Lombard kings exercised the same privilege. In the French monarchy, the Merovingians affected the still greater power of direct nomination, and their control was supported by means against which the church was wholly inadequate to contend. The estates and honors which composed the ecclesiastical temporalities, were considered to partake of the nature of fiefs, and therefore to require similar investiture from the lord. Charlemagne is said to have introduced this practice, and to have invested the newly consecrated bishop by placing a ring and crosier in his hands. Gratian, indeed (*distinct.* 63, cap. *Adrianus*), directly affirms that pope Adrian positively conceded to the emperor the power of electing, even to the papacy, in 774; but neither Eginhard nor any other contemporary writer mentions this fact. The custom, however, existed, nor does it appear to have been objected to or opposed during the lapse of two centuries from his reign. The disorderly state of Italy, which succeeded the death of Charlemagne, frequently interrupted the exercise of this right by the Carolingians; but even so late as 1047, when the empire had passed to another line, Henry III received an explicit admission of his prerogative, and repeatedly used it. The investiture in the lesser sees followed as a matter of course.

Alexander II issued a decree against lay investiture in general, which was revived by Gregory VII (Hildebrand), who, having succeeded in annulling the prerogative of the emperors to nominate or confirm popes, sought to disjoin entirely the ecclesiastical from the civil rule. He complained loudly of the humiliation to which the church was subjected by dependence upon the patronage of laymen, and condemned with far more reason the mercenary and simoniacal exactions, which ecclesiastics suffered from temporal princes as the price of the benefices which they conferred. In the council of the Lateran in 1080, he declared that no bishop or abbot, submitting to lay investiture, should be considered a prelate. The convulsions which followed engendered the Guelph and Ghibeline factions (see *Guelph*), and deluged Italy with blood for a long series of years; for the struggle commenced by Gregory with Henry IV was zealously continued by his successors, among whom Urban II and Paschal II especially distinguished themselves. It was not, however, until the papacy of Calixtus II, in 1122, that the question was terminated, as it appears, materially to the advantage of the holy see. By a concordat then arranged at Worms, Henry V resigned for ever all pretence to invest bishops by the ring and crosier, and recognised the freedom of elections: the new bishop, however, was to receive his temporalities by the sceptre. In France, even under the papacy of Hildebrand, the right of investiture does not appear to have been made a subject of open quarrel. In spite of the protests of the holy see, the kings exercised the power, but at length relinquished the presentation of the ring and crosier, and contented themselves with conferring investiture by a written instrument, or orally, upon which they were left in peaceable possession of the power. But in England, Paschal II was engaged in a contest little less fierce than that which he maintained with the emperor. Anselm, the primate, refused to do homage to Henry I for his see. The king seems to have asserted an unqualified right of investiture, which the pope, who was appealed to, as unqualifiedly denied. After a protracted struggle, and continued threats of excommunication, the controversy ended in England, as it did afterwards in Germany, by compromise. Paschal offered to concede the objections against homage, provided Henry would forego the ceremony of investiture. To this he agreed.

INVOCAVIT; the first Sunday in Lent, so

called because the primitive church began their worship, on that day, with the words of the 91st Psalm, 15th verse, *Invocavit me et exaudiam eum*. It is also called *Quadragesima*, or the 40th day, because it is 40 days before Good Friday, the day when Lent ends.

INVOICE; an account, in writing, of the particulars of merchandise, with their value, custom, charges, &c., transmitted by one merchant to another in a distant country.

INVOLUTION, in mathematics; the raising of a quantity from its root to any power assigned. Thus $2 \times 2 \times 2 = 8$. Here 8, the third power of 2, is found by involution. By continuing the process, we can obtain any power of 2, and so with other numbers.

Io; daughter of Inachus (according to some, of Argus Panoptes) and Peitho; according to others, of Iasus and Leucane. Jupiter fell in love with her. At first, she would not listen to his wishes; but, being enveloped by him with a thick cloud, she yielded herself to his embraces. Juno, notwithstanding, perceived the infidelity of her husband, and resolved to be revenged on both. Jupiter, to protect Io from the jealousy of Juno, changed her into a beautiful white heifer. Juno was not deceived, and begged the heifer of her husband. Apprehending no evil, he granted her request; but she immediately placed it under the custody of the hundred-eyed Argus. Jupiter now regretted that he had complied with her request, but it was too late; he therefore sent Mercury to kill Argus, and set Io at liberty. This commission Mercury successfully executed, having lulled the watchful Argus to sleep by playing on the flute; but at the moment when Io thought herself again at liberty, the jealous Juno afflicted her with madness, and persecuted her, without a moment's rest, through the world. She sprang into the Ionian sea, reached Ilyria, passed the Hæmus, went through Thrace, swam over the Thracian Bosphorus to Asia, passed through Scythia, over Caucasus, and came at length to Egypt. She found Prometheus in the Caucasian mountains, who comforted her, and showed her the way she must take. This way is described at length in the "Prometheus" of Æschylus. Her sufferings ended in Egypt. Here she regained her original form, and bore Epaphus, the son of Jupiter. At the instigation of Juno, the Curetes concealed the child, and were, in consequence, struck with lightning by Jupiter. After a long search, Io found her

son in Syria, and returned with him to Egypt, where she married the king, Telogonus. She was deified, and, according to some authorities, was the goddess whom the Egyptians worshipped under the name of *Isis*.

IODINE (from *ιώδης*, *violetaceous*, in allusion to the beautiful violet color of its vapor) is the name of an undecomposed principle or element in chemistry. It had escaped the observation of chemists until 1812, when a manufacturer of salt-petre, at Paris, detected it in the ashes of sea-weeds, in the following manner. In evaporating the ley from these ashes, to procure the carbonate of soda which they contain, he noticed that the metallic vessels, with which he operated, were powerfully corroded, and that the corrosion was increased as the liquor became more concentrated. Having at hand, one day, a bottle of sulphuric acid, he added some of it to a portion of the mother-water, and was surprised to see a rich violet vapor disengaged; this vapor was the iodine. He at once communicated the observation to M. Clément Desormes, who set about collecting some of the vapor, and, after examining its leading properties, announced it to the royal institute of France as a new body. Its real nature was soon after unfolded through the accurate researches of Gay-Lussac and sir H. Davy. Its history proved singularly interesting in modifying the then prevailing theory of chemistry. Sir H. Davy had, a few years previously, promulgated the new theory of chlorine, which was still received with suspicion among chemists. The strong analogies, however, between this substance and chlorine, in their relations to combustibles, —both bodies forming compounds by uniting with them, similar to acids containing oxygen, or oxides, —were conceived to give great weight to the views of sir H. Davy, and operated completely to overthrow the erroneous hypothesis of oxygenation, invented by Lavoisier. Its investigation, therefore, may be said to have formed a new era in chemistry. The physical properties of iodine are as follow: It is a soft, friable, opaque solid, of a bluish-black color, with a metallic lustre, usually in scales, but sometimes in distinct crystals of the form of rhomboids or rhomboidal tables, referable to an octahedron, with a rhombic base as their primary form; its specific gravity is 4.946. It possesses an odor somewhat analogous to that of chlorine. It is a non-conductor of electricity, and possesses in an eminent degree the electrical properties of oxygen and chlorine.

Iodine enters into fusion at 225° Fahr., and boils at 347°; but when moisture is present, it sublimes rapidly at a temperature considerably below 212°, and gives rise to a dense vapor of the usual violet hue. It is scarcely at all soluble in water, but is readily taken up by alcohol and ether, to which it imparts a reddish-brown color. It extinguishes vegetable colors, but with less energy than chlorine. It is not inflammable. Its range of affinity for other bodies is very extensive; the most important compounds it forms with these we shall describe after alluding to its natural state and preparation. It exists most abundantly in the various species of fucus, which form the greatest part of the sea-weeds of our coast; it also occurs in the sponge, and in the coverings of many molluscous animals, and has been found in a great number of mineral waters, as those of Salz in Piedmont, Saratoga in New York, &c., and more recently has been detected in some silver ores from Mexico, and in an ore of zinc from Upper Silesia. But it is from the incinerated seaweed or kelp, that the iodine, in large quantities, is obtained. As the soap-manufacturers are in the habit of obtaining their soda from kelp, iodine may be procured, very economically, from the residuums of their operation, according to the process invented by doctor Ure, which is as follows: The brown iodic liquor of the soap-boiler, or the solution of kelp from which all the crystallizable ingredients have been separated by concentration, is heated to about 230° Fahr., poured into a large stone-ware basin, and saturated with diluted sulphuric acid. When cold, the liquor is filtered through woollen cloth; and to every 12 oz. (apothecaries' measure) of it, is added 1000 grains of black oxide of manganese in powder. The mixture is put into a glass globe, or large matrass with a wide neck, over which a glass globe is inverted, and heat is applied, which causes the iodine to sublime copiously, and to condense in the upper vessel. As soon as the balloon becomes warm, another is substituted for it; and when the second becomes heated, the first is again applied. The iodine is withdrawn from the globes by a little warm water, which dissolves it very sparingly; and it is purified by undergoing a second sublimation. The test made use of for the detection of iodine in any solution, when it is suspected to be present, is starch, with which iodine has the property of uniting, and of forming with it a compound, insoluble in cold water, which is recognised with certainty

by its deep blue color. The solution should be cold at the time of adding the starch; and, if the color does not become apparent simply on the addition of the starch, a few drops of sulphuric acid should be cautiously added, when, if any iodine is present, the blue color will make its appearance. This test is so exceedingly delicate, that a liquid, containing $\frac{1}{1000}$ of its weight of iodine, receives a blue tinge from a solution of starch.—Iodine has a powerful affinity for hydrogen, which it takes from animal and vegetable substances, in the same manner as chlorine, and, uniting with it, forms hydriodic acid. The following are the methods for obtaining this acid in the gaseous and in the liquid state: Into a flask, to which a recurved tube is fitted, dipping under a jar of mercury, are introduced eight parts of iodine and one of phosphorus, and to the mixture a few drops of water are added; the water is immediately decomposed; the phosphorus, seizing its oxygen, forms phosphoric acid, while the hydrogen combines with the iodine. As there is not water present in sufficient quantity to dissolve the hydriodic acid, it passes over in the gaseous state, and is collected over the mercury. In contact with air, it smokes, or fumes, like the muriatic acid, and, like it, reddens vegetable blues. It is distinguished, however, from that acid, by the superior affinity possessed by chlorine for hydrogen, in consequence of which, if chlorine and hydriodic acid gases are mingled together, the yellow color of the former disappears, and the violet vapor of iodine makes its appearance, which proves the decomposition of the hydriodic acid by the chlorine. If the decomposition is complete, the vessel will be wholly occupied by muriatic acid gas. To obtain the hydriodic acid in a liquid state, we have only to conduct the gas through water, until it is fully charged with it; or it may be obtained by transmitting a current of sulphureted hydrogen gas through water in which iodine, in fine powder, is suspended. The iodine, from a greater affinity for hydrogen than the sulphur possesses, decomposes the sulphureted hydrogen; and hence sulphur is set free, and hydriodic acid produced. The constitution of hydriodic acid is,

	By volume.	By weight.
Iodine	50	124
Hydrogen	50	1
	100	125

The solution of hydriodic acid is easily decomposed. Thus, on exposure for a

few hours to the air, the oxygen of the atmosphere forms water with the hydrogen of the acid, and liberates the iodine. Nitric and sulphuric acids likewise decompose it by yielding oxygen, the former being converted into nitrous and the latter into sulphurous acid. The free iodine becomes obvious on the application of the above-mentioned test. The compounds of hydriodic acid with the salifiable bases may be easily formed, either by direct combination, or by acting on the basis in water with iodine. Sulphurous and muriatic acids, as well as sulphureted hydrogen, produce no change on the hydriodates, at the usual temperature of the air; but chlorine, nitric and concentrated sulphuric acid, instantly decompose them, and separate the iodine. The hydriodates of potash and soda are the most interesting of their number, because they are the chief sources of iodine in nature. The latter salt is probably the one which affords the iodine obtained from kelp; while it is believed, that it is the hydriodate of potash, which is most generally found in mineral springs. (Hence the necessity of adding sulphuric acid to the residual liquor of the soap-boiler, in order to procure the iodine, which requires to be separated from its combination with the alkali to which it is united, in the condition of hydriodic acid; and peroxide of manganese is also added, in order to facilitate the decomposition of the hydriodic acid.)—Iodine forms acids also by uniting with oxygen and with chlorine. When it is brought into contact with protoxide of chlorine, immediate action ensues; the chlorine of the protoxide unites with one portion of iodine, and its oxygen with another, forming two compounds,—a volatile orange-colored matter, the chloriodic acid, and a white solid substance, which is iodic acid. Iodic acid acts powerfully on inflammable substances. With charcoal, sulphur, sugar, and similar combustibles, it forms mixtures which detonate when heated. It enters into combination with metallic oxides, giving rise to salts called *iodates*. These compounds, like the chlorates, yield pure oxygen by heat, and deflagrate when thrown on burning charcoal. Iodic acid is decomposed by sulphurous, phosphorous and hydriodic acids, and by sulphureted hydrogen. Iodine, in each case, is set at liberty, and may be detected, as usual, by starch. Chloriodic acid, which is also formed by simply immersing dry iodine in chlorine gas, deliquesces in the open air, and dissolves very freely in water. Its solution is very

sour to the taste ; and it reddens vegetable blues, but afterwards destroys them. It does not unite with alkaline bases ; in which respect it wants one of the characteristics of an acid, and has hence been called by Gay-Lussac a *chloride of iodine*. Iodine unites with nitrogen, forming a dark powder, which is characterized, like chloride of nitrogen, by its explosive property. In order to form it, iodine is put into a solution of ammonia ; the alkali is decomposed ; its elements unite with different portions of iodine, and thus cause the formation of hydriodic acid and iodide of nitrogen. Iodine forms, with sulphur, a feeble compound, of a grayish-black color. With phosphorus, also, it combines with great rapidity at common temperatures, attended with the emergence of heat. It manifests little disposition to combine with metallic oxides ; but it has a strong attraction for the pure metals, producing compounds which are called *iodurets*, or *iodides*. The iodides of lead, copper, bismuth, silver and mercury, are insoluble in water, while the iodides of the very oxidizable metals are soluble in that liquid. If we mix a hydriodate with the metallic solutions, all the metals which do not decompose water will give precipitates, while those which decompose that liquid will give none. Iodine, besides being employed for philosophical illustration, is used in the arts, for pigments, dyes and medicine. The proto-ioduret of mercury is used in England as a substitute for vermilion, in the preparation of paper-hangings ; and a compound of hydriodate of potassa 65, iodate of potassa 2, and ioduret of mercury 33, is employed in printing calico. The tincture of iodine, 48 grs. to 1 oz. of alcohol, is a powerful remedy in the goitre and other glandular diseases ; but it is so violent in its action on the system as to require great caution in its administration. The hydriodate of potash, or of soda, is also applied to medical uses ; and it is inferred, that the efficacy of many mineral springs, in certain diseases, is owing to the presence of one or the other of these salts.

IOLAUS. (See *Protesilaus*.)

IOLÉ. (See *Hercules*.)

IOLITE, CORDIERITE, or DICHOITE, is an earthy mineral, commonly massive, though sometimes crystallized in six or twelve-sided prisms, with indistinct cleavages, parallel to the sides of a six-sided prism, which is considered as its primary form ; lustre, vitreous ; color, various shades of blue, generally inclining to

black ; streak, white ; transparent or translucent ; blue, if viewed in the direction of the axis ; yellowish gray, perpendicular to it ; hardness, the same as that of quartz ; specific gravity, 2.583. It consists, according to Stromeyer, of

Silica,	48.538
Alumina,	31.730
Magnesia,	11.305
Oxide of iron,	5.686
Oxide of manganese,	0.702
Water, or loss,	1.648

Before the blowpipe, it melts in a good heat, but with difficulty, and only on its edges, into a glass not inferior to the mineral, either in color or transparency. It occurs in aggregated crystals, with garnet, quartz, &c., at Cabo de Gata in Spain. A variety found in Bavaria, at Bodenmais, which is generally massive, resembling quartz, and imbedded in iron pyrites, has been called *pelion*. Handsome blue crystals of this species, found at Orijerfvi in Finland, have been called *steinheilite*, in honor of count Steinheil. The *sapphire d'eau* of jewellers is a transparent variety of the present species from Ceylon.

ION ; a son of Xuthus and Creusa, daughter of Erechtheus, who married Helice, the daughter of Selinus, king of Ægiale. He succeeded to the throne of his father-in-law, and built a city, which he called *Helice*, on account of his wife. His subjects, from him, received the name of *Ionians*, and the country that of *Ionia*. (See *Ionians*.)—A tragic poet of Chios, who flourished about the 82d Olympiad. His tragedies were represented at Athens, where they met with universal applause. He is mentioned and greatly commended by Aristophanes and Athenæus, &c.—A native of Ephesus, introduced in Plato's dialogues as reasoning with Socrates.

IONA. (See *Icolmkill*.)

IONIA ; the ancient name of Achaia (hence the *Ionian* sea and *Ionian* islands). By *Ionia* is generally understood that district of Asia Minor, where the Ionians from Attica settled, about 1050 B. C. This beautiful and fertile country extended from the river Hermus to the Mæander, along the shore of the Ægean sea, opposite the islands of Samos and Chios, and was bounded by Caria, Æolia and Lydia. Commerce, navigation and agriculture early rendered it wealthy and flourishing, as is proved by the great number of populous cities it contained, among which the most important were Ephesus (the chief place), Smyrna, Clazomenæ, Erythra, Colophon and Miletus. These

free cities formed the Ionian league, but Cræsus, and afterwards Cyrus, made them tributaries. They remained subject to the Persians until they recovered their independence by the assistance of the Athenians and Lacedæmonians, after having previously made an unsuccessful attempt, during the reign of Darius Hystaspes. They were again subjected, and again delivered by Alexander the Great. Ionia, at a later period, became a Roman province, and was totally devastated by the Saracens, so that few vestiges of its ancient civilization remain. The Ionians were considered effeminate and voluptuous, but, at the same time, highly amiable. Their dialect partook of their character. (See *Ionian Dialect*.) The arts and sciences flourished in this happy country, particularly those which contribute to embellish life. The Asiatic Greeks became the teachers and examples of the European Greeks. Homer the poet, Apelles and Parrhasius the painters, were Ionians. The Ionic column proves the delicacy of their taste. (See *Architecture, Ionian Philosophy, and Ionians*.)

IONIAN DIALECT; one of the Greek dialects, the softest of all, on account of the large proportion of the vowels to the consonants (see the article *Consonant*), which was particularly spoken in the Greek colonies in Asia Minor and on the islands of the Archipelago. It is divided into the old and new. In the former, Homer and Hesiod wrote. It originally differed little, or not at all, from the old Attic. The new Ionian originated after the Ionians had more intercourse with the other tribes, and planted colonies. Anacreon, Herodotus and Hippocrates wrote in this dialect. (See *Greek Language*, under the head of *Greece*, and *Dialect*.)

IONIAN ISLANDS; a republic in the South of Europe, under the protection of Great Britain, situated in the Ionian sea, along the western coast of Greece and Albania. The state is often called the *Republic of the Seven Islands*, on account of the seven chief islands of which it is composed, viz., Corfu, Paxos, Santa Maura, Thiaki or Ithaca, and Cephalonia, lying west of the gulf of Lepanto; Zante, near the western shore of the Morea; and Cerigo, to the south-east of the same peninsula. The other islands and islets of this little state are Merlera, Fano, Samotraki, Anti-Paxos, Calamos, Meganesi and Cerigotto, which is the most southern and most eastern point of the republic, in 35° 50' lat. N., and 23° 17' lon. E. Merlera, in 39° 57' lat. N., is the most northern, and Fano,

in 19° lon. E., the most western point. Most of the inhabitants of the Ionian islands are of Greek origin. A census, in 1814, gave a population of 218,000: at present, it amounts to about 227,000, of whom about 8000 are Italians, and 7000 Jews. There are also some English there. The inhabitants are in general superstitious, and their morals are lax. Until of late, the language spoken here was a corrupt Italian, but modern Greek now prevails. The English and Greek inhabitants have little intercourse, notwithstanding the efforts of the English government. In 1828, there were 20 schools of mutual instruction, a college, and a university, founded in 1823.—The coasts of the islands are rugged, the surface uneven, containing a number of barren rocks and some high hills, interspersed with fertile plains and valleys. The climate is very mild, but subject to sudden changes. The productions are corn, vines, olives, currants, cotton, honey, wax, &c. Vines and olives form the chief source of income to the inhabitants. In 1825, the exports amounted to about \$660,600. The currants and small dried grapes are exported in large quantities. Since 1815, this state has formed an aristocratic government, under the name of the *United Ionian Islands*, under the protection of Great Britain, and entirely dependent on her. A constitution was granted by Great Britain, in 1817. There is a British high-commissioner at Corfu, the capital of the state, and Great Britain has a right to occupy the fortresses, and keep garrisons. The high-commissioner convokes the legislative assembly, appoints the governors of the different islands, and commands the forces. The legislative assembly consists of 40 members, and holds its sessions at Corfu. Five senators, chosen by the legislative assembly from their own number, and a president, appointed by the commissioner, for five years, form the senate. The civil law is the law of the land. Revenue, about £150,000; expenditure for the force maintained by Great Britain (6400 men, among whom are four regiments of natives), £100,000.—These islands were inhabited at an early period, and formed small states in the most flourishing period of Greece. They were reduced by Alexander the Great, at a later period by the Romans, and they afterwards formed part of the Byzantine empire. The kings of Naples obtained possession, in the 13th century, of Corfu and other islands, but, in the 14th century, the Venetians, then the masters of the Adriatic sea, occupied

all the Seven Islands. Corfu placed herself under the protection of Venice, in 1386, and the other islands followed her example. Venice left the government in its former state, merely sending out *provveditori* as heads of the administration. The claims of Naples were extinguished by purchase, and Venice remained in possession of the islands, in spite of the repeated attacks of the Turks, until the republic of Venice was itself dissolved, in 1797. In 1799, the Russians and Turks conquered them; and the emperor Paul, by a ukase of March 21, 1800, declared them a state, under the name of the *Republic of the Seven United Islands*, forming an aristocracy under the protection of Turkey. In 1803, Russia granted a new constitution. In 1807, they were incorporated with the great empire of France; but the French were able to maintain only Corfu. Nov. 5, 1815, it was agreed between Russia and Great Britain (later also Austria), that the islands should form a republic, under the name of the *United State of the Ionian Islands*, and under the exclusive protection of Great Britain. In April, 1819, Great Britain agreed to cede to the Porte the city of Parga, on the continent, which had so long maintained itself against Ali Pacha. (q. v.) The greater part of the Pargiots, in despair, emigrated to the Ionian islands. (See *Parga*.) The commercial flag of the Ionian Islands is acknowledged as the flag of an independent nation. (See the works of Gell, Dodwell, Hughes, Mustoxodi, and Kendrik; also, *Essay on the Islands of Corfu, Leucadia, Cephalonia, &c.*, by W. Goodisson (London, 1822); *Antiquities of Ionia*, published by the society of Diletanti, London.)

IONIAN ORDER. (See *Architecture*.)

IONIAN PHILOSOPHY. As Grecian civilization was first developed among the Ionians (see *Ionians* and *Ionia*), Grecian philosophy also originated among them. The Ionian philosophy started with the question respecting the primitive elements of the world. To the Ionian school (*οἱ φυσικοί*) belong Thales, Anaximander, Pherecydes, and, in some points, Anaximenes. (See *Philosophy*, and consult Bouterwek, *De primis Phil. Græc. Decretis Physicis*, in the second volume of the *Comm. Soc. Gætt.*, 1811; Ritter, *Geschichte der Ionischen Philosophie*, Berlin, 1821, and *Geschichte der Philosophie*, volume 1st, by the same, Hamburg, 1829). In modern times, the Ionian philosophy has been revived, in connexion with the atomic system, by Berigard, Magnenus, Sennert and Gassendi. (q. v.)

IONIAN SEA; ancient name of that part of the Mediterranean which lies between the south part of Italy and Greece.

IONIANS; a tribe of Greeks, deriving its name from Ion. (q. v.) They first lived in the Peloponnesus, on the borders of the gulf of Corinth, where they built 12 cities, celebrated for their manufactures and commerce. The Achæans, being pressed by the Heraclides and Dorians, united themselves with them, and the country became insufficient for both people; the Ionians therefore emigrated to Attica, whence Neleus led a colony to Asia. (See *Ionia*.) Those who had remained in Attica were mingled with other tribes, and the Asiatic Ionians alone retained the name.

IONIC FOOT consists of four syllables, two short and two long. If the two short syllables are in the beginning (υ υ — —), it is called *ionicus minor*; if the two short syllables follow (— υ υ), it is called *ionicus major*. Horace used the former.

IOTA; the Greek name for *i*. (See *L*.)

IPECACUANHA, according to the latest authorities, is the product of two different plants, both natives of South America. The gray is the root of a species of *richardia*; the other, that of the *cephalis ipecacuanha*. The two roots, however, do not differ in their medicinal properties, and they are much employed indiscriminately. It was first brought to Europe towards the middle of the 17th century; but was not generally used till about the year 1686, when it was introduced, under the patronage of Louis XIV. Its taste is bitter and acrid, covering the tongue with a kind of mucilage. It is one of the safest and mildest emetics with which we are acquainted, and is administered as a powder, in the tincture, or infused in wine. It is also less injurious, if it does not operate as an emetic, than antimony, from its not disturbing the bowels as that does.

IPHICRATES; a famous Athenian military commander, in the fourth century before the Christian era. He was born in obscurity, but raised himself to eminence in his profession, by his courage and talents, early in life. In the war of Corinth, 395 B. C., he opposed, with success, Agesilaus, the warlike king of Sparta. He afterwards commanded a body of auxiliary troops, in the service of Artaxerxes, king of Persia, in an expedition to Egypt; and, in 368 B. C., he relieved Sparta, when invaded by the Theban general Epaminondas. In the social war, he was one of the commanders of the fleet fitted out by the Athenians, for the recovery of Byzantium, when, being accused of

treachery by one of his colleagues, he defended himself with such spirit, that he was acquitted by his volatile countrymen; but, though he lived to a great age, he did not again engage in active service. In the early part of his career, he restored to his dominions Seuthes, king of Thrace, whose daughter he married. Iphicrates was a strict observer of discipline, and was the author of some important improvements in the arms and accoutrements of the Athenian soldiery. He was accustomed always to fortify his camp in the field, even in a friendly country; and, when once asked why he took so much trouble, he answered, "Because, if, contrary to probability, I should be attacked, I may not be obliged to make the disgraceful excuse, that I did not expect it."

IPHIGENIA, daughter of Agamemnon and Clytemnestra (according to some, an illegitimate daughter of Theseus and Helen, adopted by Clytemnestra in childhood), was to have been sacrificed to Diana, at the advice of the prophet Calchas, when the goddess, enraged with Agamemnon, because he had slain, in hunting, her consecrated hind, detained the Greek fleet in Aulis by a calm. Under the pretence that she was to be married to Achilles, Iphigenia was taken from her mother, and led to the altar. But, in the moment when the priest was about to give the death blow, Iphigenia disappeared, and, in her stead, a beautiful hind was substituted, whose blood gushed out on the altar. Diana had relented, and conveyed her in a cloud to Tauris, where she became the priestess of the goddess. Conformably with the cruel law of the country, she was obliged to sacrifice every Greek that landed there. Her brother Orestes, coming thither on his wanderings, in despair at the murder of his mother, and wishing to take away the statues of Diana, was likewise condemned to be sacrificed to the goddess. A recognition took place in the temple, and, after deliberating on the means of escape, Orestes succeeded in removing Iphigenia and the statues of Diana. Some nations maintained, that they derived the worship of Diana of Tauris from Iphigenia. She herself is said to have arrived at the island of Leuca, and, after being endowed with immortal youth, and the name of Orilochia, to have married the shade of Achilles. Pausanias says that her grave was shown at Megara. In two famous operas by Gluck, and Göthe's masterpiece, *Iphigenia auf Tauris* (Iphigenia at Tauris), Iphigenia is the leading character.

IPHITUS; king of Elis, in Greece, the son of Praxionidas, and grandson of Oxy-lus, memorable as the instiutor of the famous Olympic games. They are said to have been originally celebrated by Pe-lops, or, according to some, by Hercules, in honor of Jupiter; and, after being neglected for several ages, they were restored or reëstablished by Iphitus. Controversies have arisen as to the age in which this prince lived. Some chronologers place him 884 B. C.; but sir Isaac Newton has shown that he probably lived a century later, and that the first games of his institution were held 776 B. C.; from which period they were continued, without interruption, for several centuries. (See *Olympic Games*.)

IPSARA. (See *Psara*.)

IPSILANTI. (See *Ypsilanti*.)

IRAK ADJEMI. (See *Persia*.)

IRAK ARABI; the ancient Babylonia and Chaldæa.

IRAN. (See *Persia*.)

IRELAND; a large and fertile island of Europe, in the Atlantic ocean, lying to the west of Great Britain, from which it is separated by the Irish sea, or St. George's channel; in some parts 120 miles broad, in others not above 12 miles. This country is situated between lon. 5° 19' and 10° 28' W., and lat. 51° 15' and 55° 23' N.; its superficial extent is not accurately known. Pinkerton assigns it an area of 27,451 square miles; Wakefield, of 32,201. Ireland is divided into four great provinces, viz. Ulster, Leinster, Connaught, and Munster, which are again divided into 32 counties, containing 2436 parishes. Ulster, which occupies the northern part of the kingdom, contains nine counties, viz. Antrim, Armagh, Cavan, Donegal, Down, Fermanagh, Londonderry, Monaghan, and Tyrone. Leinster, situated to the east, contains 12 counties, viz. Carlow, Dublin, Kildare, Kilkenny, King's county, Longford, Louth, Meath, Queen's county, Westmeath, Wexford, and Wicklow. Connaught, towards the west, contains five counties, viz. Galway, Leitrim, Mayo, Roscommon, and Sligo. Munster, which occupies the southern part of the kingdom, contains six counties, viz. Clare, Cork, Kerry, Limerick, Tipperary, and Waterford. The face of the country affords a pleasing variety of surface. In some parts there are rich and fertile plains, watered by large and beautiful streams, while in other parts hills are found in frequent succession, which give an agreeable diversity to the scenery. The mountainous chains of Ireland are neither numer-

ous nor important; for, though the country contains many hills of considerable elevation, yet they are not of such height, nor are they collected into such masses, as to give to Ireland the character of a mountainous country. The hilly parts of Ireland are, in general, of easy ascent, and admit of culture a considerable way up their sides; some of them, however, are precipitous, and terminate in cones, or spires. The principal rivers are the Shannon, the Bandon, the Lee, the Blackwater, or Broadwater, the Liffey, the Boyne, the Suire, the Barrow, the Slaney, and the Bann; the principal lakes, or *loughs*, lough Neagh, lough Erne, and lough Corrib. Lough Lane, or the lake of Killarney, is the most distinguished for its beauties. The harbors of Ireland are excellent and very numerous; these are Waterford and Cork harbors on the south, Bantry and Dingle bays on the south-west, the estuary of the Shannon and the vast bay of Galway on the west, that great opening on the north-west, of which the bay of Sligo is a part. Lough Swilly and lough Foyle, on the north, are the most considerable. On the east side are the harbors of Belfast and Newry, and the barred havens of Dublin, Drogheda and Wexford. The principal commercial towns are Dublin, Cork, Belfast, Limerick and Waterford. The numerous lakes and rivers render the inland navigation extensive, and are connected by several canals. (See *Canals*.) The climate of Ireland is, in general, more temperate than the climate of other countries in the same latitude; the heat of summer is less oppressive, and the cold of winter less severe. It is also much more inclined to moisture, falls of rain being more frequent, and the atmosphere, even when there is no rain, being impregnated with a moisture which affects the walls of houses, as well as furniture and other articles. The soil of Ireland is, generally speaking, a fertile loam, with a rocky substratum. The bogs of Ireland form a very remarkable feature of the country; these are of different kinds, and in some places are very extensive. In the reports of the commissioners appointed, in 1809, to inquire into the nature and extent of Irish bogs, their extent is stated at 2,830,000 English acres. The greater part were considered by the commissioners to form one connected whole; and a portion of Ireland, of little more than one fourth of its entire superficial contents, and included between a line drawn from Wicklow-head to Galway, and another drawn from Howth-head to Sligo, was supposed by the commission-

ers to comprise within it six sevenths of the bogs in the island, exclusive of some mountain bogs and bays of less extent than 500 acres. They were perfectly convinced of the practicability of draining these marshes. Ireland is said to rest on a bed of granite, and granite is accordingly abundant, also limestone. The basaltic region is in the north-eastern part of the island. (See *Giant's Causeway*.) A great variety of marbles is found, also gypsum, fuller's earth and coal. Precious stones have been discovered in Ireland, namely, beryls, amethysts and jaspers, and also various species of crystals, which are hard, large, and very brilliant. Pieces of native gold have also been found. There are mines of lead, copper and cobalt, some of which have been wrought to great advantage, and some are at present worked by the Irish mining company. Two copper mines are now worked in the county of Cork. Iron ore is abundant, and in the middle of the 17th century, iron-works were very common. Mineral springs, chiefly chalybeates, are found in almost every county. There is a remarkable deficiency of wood in Ireland, though old historians speak of the country as a continuous forest. The woods were destroyed with so unsparing a hand, that well-grown timber is rarely to be seen. In the 17th century, they were infested with wolves. Notwithstanding the great fertility of the soil, the average produce is much less than in England, owing to the backward state of agriculture. In 1809, it was calculated that two millions of acres were employed in the culture of grain, about 800,000 in that of potatoes, and 150,000 in that of flax. The amount of land at present under tillage is probably five millions. The average amount of grain exported, in the four years preceding 1728, was 26,638 quarters; in 1825, it amounted to 12,774,442 quarters, although the population had trebled in the mean time. The same remarkable results appear in the number of cattle reared. The bullocks, cows and horses exported, on an average of seven years preceding 1770, amounted to 2127; in 1826, they amounted to 66,649. In the same year were exported 72,101 sheep, and 65,919 swine. The cattle are of a very excellent description. The butter trade is considered, at present, as the staple trade, and a much greater extent of country is covered by dairy than by grazing farms. In 1824, 521,465 cwts. of butter were exported, and the quantity has since increased. The cultivation of flax, on a large scale, dates from the beginning of

the last century, and has now probably reached its maximum. Since 1827, a good deal of tobacco, of inferior quality, has been raised with profit. The linen manufacture has been of great importance to Ireland, not only in a commercial, but in a moral point of view. It is a domestic industry, the spinners and weavers being, in general, rural peasantry, who add the manufacturing business to the care of a few acres of ground. The linen exported from Ireland in

1710, was 1,688,574 yards ;
1730, . . . 4,436,203 “
1750, . . . 11,200,000 “
1770, . . . 20,560,754 “
1790, . . . 37,446,133 “
1810, . . . 37,165,039 “
1818, . . . 55,770,636 “
1822, . . . 49,414,775 “
1823, . . . 43,464,363 “

The commercial intercourse between Great Britain and Ireland having been put on the footing of the coasting trade, in 1824, there are no official records later than the above; but it is well known that the linen manufacture has continued to decline, and has yielded no profits for the last six years, partly on account of the comparative cheapness of cotton stuffs, and partly on account of the manufacture of an article composed of linen and cotton, which deceives the most practised eye, and is sold at half the price. The cotton manufacture has, however, increased. The cotton stuffs manufactured in Ireland, and exported to Great Britain, amounted, in

1822, to 406,687 yards ;
1824, . . . 3,840,699 “
1825, . . . 6,418,640 “

The consumption of cotton goods in the country is more than double what it was 20 years ago. The country possesses many natural advantages for the woollen manufacture, but it has been crippled by the English legislation. The silk manufacture has much declined. The distilleries of Ireland are very extensive, and a considerable quantity of whiskey is exported. In 1826, 9,895,567 gallons of spirits were produced from the licensed distilleries, and the quantity from unlicensed stills was estimated at six millions. The industry and resources of the country have been wonderfully developed during the latter part of the last century, and still more since the beginning of the present century, as appears from the following table of the total exports and imports :—

	<i>Imports.</i>	<i>Exports.</i>
1720, . . .	£ 752,245 . . .	£ 1,287,988
1760, . . .	1,740,660 . . .	2,519,569
1790, . . .	3,758,579 . . .	4,651,755
1800, . . .	5,155,013 . . .	3,452,137
1810, . . .	6,059,612 . . .	5,630,157
1820, . . .	5,190,888 . . .	7,169,128

The official values here given fall considerably short of the real values. The total of imports from 1781 to 1800 was £49,763,506; from 1802 to 1820, £91,450,593; of exports for the former period, 69,692,764; for the latter, 103,672,510 (official value in Irish currency). An act, passed in 1819, for the encouragement of the Irish fisheries, has had a remarkable effect. The number of men registered was, in

1821,	36,000 ;
1823,	49,448
1825,	57,809
1827,	59,177

The net produce of the ordinary revenue of the kingdom amounts to nearly five millions annually (exclusive of loans and duties appropriated to national objects), which is ten times the sum that was raised with difficulty in the first half of the last century, and about four times the amount raised at the beginning of this century. The debt of Ireland in 1817 was £134,602,769; but it was then considered expedient to unite the exchequer of Ireland with that of Great Britain, and thus consolidate the public debts of the two kingdoms. The population of the country has also increased rapidly and steadily. In 1695, it was estimated at 1,034,000; in 1754, at 2,372,634; in 1785, at 2,845,932. In 1821, the census gave 6,846,999 as the total population; and, according to estimates formed by M. Moreau, in 1827, it amounted to 7,672,000. A calculation, founded chiefly on returns from schools, gives 1,970,000 Protestants (of whom 700,000 are Presbyterians) 4,780,000 Catholics, and the remainder uncertain. The established church of Ireland resembles that of England. The dignitaries are four archbishops,—of Armagh (primate of all Ireland), of Dublin (primate of Ireland), of Cashel, and of Tuam,—and 18 bishops. The average revenue of these sees is about £9,000 per annum; the income of two of the primates is £14,000; of the bishop of Derry, 15,000; of the bishop of Elphin, 12,000. The number of parishes is stated at 2167, the beneficed clergy at 1300, and the curates at 400. The clergy not of the established church are estimated at about 2378, viz. 1994 Roman Catholic, 239 Presbyterian, and 145 of other sects.—

Their whole income is about £264,000. "In Ireland," says the Eclectic Review (1823), "the church of England has the tithes, the church of Rome the people. Of nearly seven millions of people, 5½ millions are Roman Catholics, above one million dissenters, and less than half a million (400,000) adherents of the establishment. To minister to these 400,000 hearers, there are 1700 clergy (of whom 587 are dignitaries), with an income of £1,300,000." The income of the clergy of the other 6½ millions we have above mentioned is £264,000. (Consult Moreau's *Statistical State of Ireland* (London, 1827), Wakefield's *Account of Ireland* (1812), Young's, Beaufort's, Reid's (1823) *Travels in Ireland*.) Until 1800, Ireland had a separate parliament; but, the union with England having been effected in that year, the country is now represented in the imperial parliament. The government is administered by a viceroy appointed by the king, with the title of *lord lieutenant of Ireland*. An Irish chancellor, commander of the forces, chief secretary, vice-treasurer, and attorney and solicitor general, &c., compose the Irish ministry. In 1827, the Irish peers were 213—1 duke, 14 marquises, 76 earls, 48 viscounts, 70 barons, and 4 peeresses. They are represented in the British house of lords by 28 representative peers; the church is also represented by four representative bishops. The Irish commons are represented by 64 knights and 36 citizens and burgesses. By 10 George IV, c. 8 (13 April, 1829), a freehold of £10 clear yearly value is made a qualification for voters, in the election of knights of the shires, and the 40 shilling freeholders, of whom the number was 184,492, are disfranchised.

The beginning of the history of Ireland is enveloped in fable. The historians of the country (O'Flaherty, Keating, O'Halloran, Vallancey, Plowden) speak of Greek and Phœnician colonies, give lists of kings, &c., for which there is no historical foundation. The vernacular language of the Irish proves that they are a part of the great Celtic race, which was once spread all over Western Europe. (See *Gaul*.) No Irish manuscript has been found more ancient than the 10th century. The oldest and most authentic Irish records were written between the 10th and 12th centuries; some of them go back, with some consistency, as far as the Christian era; but there is no evidence that the Irish had the use of letters before the middle of the fifth century, when Christianity and Christian literature were introduced by St. Patrick.

The new faith did not flourish till a century later, when St. Columba erected monasteries. In the eighth and ninth centuries, the scholars of Ireland were among the most distinguished at the courts of the Saxon kings, and of Charlemagne. But when the Northmen commenced their descents on the coasts, the ecclesiastics took to flight; and it is evident, from the condition of the people at a later period, that the learning of the Irish clergy never extended beyond the walls of the monasteries. Divided among a number of barbarous and hostile chiefs, Ireland had been for a long time torn by internal wars, and, for nearly two centuries, ravaged by the Danes, when, in the beginning of the 11th century, Brian Borrhoimi, or Boroihmh (the Conqueror), united the greater part of the island under his sceptre, restored public tranquillity, and expelled the northern invaders. In 1155, Henry II, king of England, obtained a bull from Adrian IV, granting him the possession of Ireland. In 1169, English troops under the earl of Pembroke (Strongbow) landed in the country, which was soon partially reduced by the invaders, aided by the mutual hostilities and jealousies of the native chiefs. The country over which the English actually ruled included the four counties of Dublin, Meath, Louth and Kildare, and was called the *pale*. In the rest of the island, the native chiefs still maintained their independence. In 1310, Edward Bruce, brother of the king of Scotland, landed in Ireland, at the head of a Scotch force, and caused himself to be crowned king of the island; but, not being vigorously supported by the Irish, who had invited his assistance, he was defeated by the English, and the Scotch were obliged to return without accomplishing any thing. There still remained one independent prince, in the province of Ulster, whose daughter and heir having been married to the duke of Clarence, son of Edward III, that province came into the hands of the English in 1361. A parliament, held at Kilkenny in 1367, forbade intermarriages with the Irish, the use of their language, &c., under severe penalties, and thus contributed to widen the distinction between the two nations, which it should have been the policy of the English government to amalgamate. In the reign of Henry VI, Richard, duke of York, was appointed chief governor; and an attachment to his descendants continued to influence the Anglo-Irish during the reign of Henry VII, as appears in the affair of Lambert Simnel. In his reign (1495) was passed

Poyning's act (so called from sir Edward Poyning, lord-deputy of Ireland), which provided that all former laws passed in England should be in force in Ireland, and that no Irish parliament should be held without previously stating the reasons on account of which it was to be summoned, and the laws which it was intended to enact. When Henry VIII, in the 16th century, embraced the reformation, the Irish continued to adhere to the Catholic religion. But, in 1541, Henry received from the Irish parliament the title of *king of Ireland*, instead of *lord*, which he had before borne, as a vassal of the pope. The monasteries were suppressed, the tribute to the papal see abolished, and, to reward the chieftains for their submission, O'Neil, O'Brien and De Burgo were created earls; they were the oldest peers of Irish descent. Under Edward VI, the deputy proposed to the Irish parliament the adoption of the reformation. Three archbishops and 17 bishops left the assembly; most of the clergy fled the country, and those of the lower clergy who remained, being deprived of their incomes, lived on the charity of their parishioners. Elizabeth, in 1560, caused the measures adopted in the reign of Mary to be abrogated, and replaced every thing on its former footing. She endeavored to improve the condition of Ireland, and employed able men to effect her purposes, yet her reign was marked by a series of risings, which finally terminated in a general war against England, usually called the *rebellion*. O'Neil, earl of Tyrone, instigated by the pope, and supported by the Spaniards, was the leader in this war, which, though successfully begun, ended with the reduction of the whole island (1603). In 1613, the first national parliament was held in Ireland; but of 226 members of the house of commons, 125 were Protestants, and the upper house consisted of 25 Protestant bishops and 25 temporal lords, of whom but few were Catholics. The reign of James (1603—25) was, on the whole, favorable to Ireland; the arbitrary power of some of the chieftains was restrained, the administration of justice improved, &c.; but religious troubles were occasioned by the disabilities to which the Catholics were subjected. On the accession of Charles I, Wentworth, afterwards earl Strafford, was appointed lord-lieutenant; and his administration was beneficial to the country. But the republican inclinations of the English residents, the hate which existed between them and the Irish Catholics, the influence of the Irish clergy, who were

educated in foreign countries, with other circumstances, led to an attempt to shake off the English yoke. Dr. Lingard says of this insurrection, that it has been usual for writers to paint the atrocities of the natives and to omit those of their opponents, but that revolting barbarities are equally recorded of both, and that if among the one there were monsters who thirsted for blood, there were among the others those who had long been accustomed to deem the life of a mere Irishman beneath their notice. After the death of Charles, Cromwell was appointed lieutenant of Ireland, and, with his usual energy and promptitude, but with great cruelty, soon reduced the whole country. All the possessions of the Catholics were confiscated, about 20,000 Irish were sold as slaves in America, and 40,000 entered into foreign service, to escape the severity of the conqueror. Charles II restored the fourth part of the confiscated estates to the Irish, and James II appointed Tyrconnel, a Catholic, lord-lieutenant of Ireland, and filled the parliament with Catholics. But the battle of the Boyne (1689) restored the Protestant ascendancy. William proscribed the adherents of James, and confiscated their estates. Great numbers of the Irish entered the French army, and it has been computed that 450,000 fell in the French service, from 1691 to 1745. The dependence of the Irish parliament on the English next became a subject of controversy, and in 1719 was passed an act declaring that the British parliament had full power to make laws binding the people of Ireland. The Irish trade and industry were also subject to every kind of restriction and discouragement; and it was not until the American war broke out, that a change became perceptible in the conduct and language of the British government towards Ireland. The Irish parliament demanded free trade, but the nation went much further; and, in 1782, the parliament of Ireland was placed on the same footing with that of England. The French revolution was another occasion which encouraged the Irish to attempt to obtain new concessions. An association was accordingly formed, under the name of the *United Irishmen*, the secret object of which has been asserted to be the establishment of an independent republic. The Catholics also held a convention, in 1792, and obtained the removal of some grievances of which they complained. As the troubles continued, the *habeas corpus* act was suspended in 1796. The leaders of the Irish union

were arrested in 1798, and the plan of an insurrection was discovered; yet quiet was not restored without much bloodshed. In order to prevent further troubles, it was thought advisable to effect a union of Ireland with England, which was done in 1800. The future history of Ireland belongs to Great Britain (q. v.; see, also, the article *Catholic Emancipation*).

IRELAND, William Henry, is the son of the late Samuel Ireland, well known as the author of several tours, and as illustrator of Hogarth. The son was born in London, educated at the academy in Soho square, and articled to a conveyancer of New Inn, where, having much leisure, he began to exercise his ingenuity in imitating ancient writings. His progress in this encouraged him to endeavor to pass off some imitations of Shakspeare as the real remains of the bard. Having executed some of them on the blanks of old books, he communicated them to his father as recently discovered MSS. of Shakspeare. The father made the discovery public. The public were greatly interested by these papers, and a few, who ought to have known better, admitted their authenticity, and in private companies, with much warmth, supported it. A subscription was set on foot to enable the Irelands to print them. A splendid volume appeared in 1798, and, at Drury-lane theatre, a play was performed, called *Vortigern and Rowena*, as a specimen. On the appearance of the volume and the play, both the readers and the audience detected the cheat, which had, however, already been properly exposed by Mr. Malone. Young Ireland now found it necessary, for his father's character, to acknowledge the fraud, and published an authentic Account of the Shakspeare Manuscripts, in which he solemnly declares that his father was deceived by him; that he alone was the author and writer, and that no one else had any part in the affair; and, lastly, that he should not have gone so far, had not the public praised the papers so much, and flattered his vanity. Since then, Mr. Ireland has written several novels, some poetry, a work called *France during the last seven Years of the Bourbons*, *Anecdotes of Napoleon*, a *Life of Napoleon*, &c.

IRENEUS, ST.; presbyter, and, at a later period, bishop of Lyons, towards the end of the second century, a pupil of Polycarp and Papias; a man of considerable learning, and animated with an ardent zeal for Christianity. He was violent in his opposition to the heretical Chiliasts.

His works are all lost, except his *Libri V adversus Hæreses*, and these are extant only in a translation. He suffered martyrdom (after 202), and is honored as a saint. His day is April 6. His works have been edited by Feuerardent (Paris, 1596, folio), Grabe (Oxford, 1702, folio), Massuet (Paris, 1710). His fragments have also been collected by C. M. Pfaff (Hague, 1715).—There are several other martyrs of this name, and three men of the same name are mentioned in the Greek Anthology.

IRENE; 1. in mythology, one of the Hours (see *Hours*), denoting *peace*.—2. An empress of Constantinople, alike famous for talent and beauty, and for her crimes; was born at Athens, and, in 769, married Leo IV, after whose death, by poison administered by her, she raised herself (780), and her son, Constantine VI, who was then but nine years old, to the imperial throne, with the aid of the nobles. She believed it necessary to strengthen herself in this dignity by new acts of violence, and caused the two brothers of her murdered husband, who had formed a conspiracy against her, to be executed. Charlemagne at that time menaced the Eastern empire. Irene at first delayed him by promises. She at last went so far as to oppose him, arms in hand; but he totally defeated her army in Calabria, in the year 788. Two years before, she had convened two general councils at Nice, in which the Iconoclasts were particularly attacked. (See *Iconoclasts*.) When Constantine had grown up, he refused to permit her to participate longer in the government, and actually reigned alone seven years, when he was arrested at the order of his mother, his eyes plucked out, and himself finally murdered. Irene was the first female who reigned over the Eastern empire. Her entrance into Constantinople on a triumphal car of gold and precious stones, her liberality to the people, the freedom which she bestowed on all prisoners, and other artifices employed by her, were not sufficient to secure her from the consequences of her criminal accession. She had ordered many nobles into banishment, and, to secure yet more firmly the possession of the throne, had just resolved to marry Charlemagne, when Nicephorus, who was placed on the imperial throne, exiled her, in 802, to the isle of Lesbos, where she died, in 803.

IRETON, Henry; an eminent commander and statesman, of the parliamentary party, in the civil wars of Charles I. He was descended from a good family, and

was brought up to the law; but, when the civil contests commenced, he joined the parliamentary army, and, by the interest of Cromwell, whose daughter Bridget he married, he became commissary-general. He commanded the left wing at the battle of Naseby, which was defeated by the furious onset of prince Rupert, and he himself wounded and made prisoner. He soon recovered his liberty, and took a great share in all the transactions which threw the parliament into the power of the army. It was from his suggestion that Cromwell called together a secret council of officers, to deliberate upon the disposal of the king's person, and the settlement of the government. He had also a principal hand in framing the ordinance for the king's trial, and sat himself as one of the judges. Ireton accompanied Cromwell to Ireland, in 1649, and was left by him in that island as lord deputy. He reduced the natives to obedience with great vigor, but not without cruelty. He died in Limerick, in 1651. Hume calls him a memorable person, celebrated for vigilance, capacity, and a rigid exercise of justice, during his unlimited command in Ireland. After the restoration, his body was taken up and suspended from the gallows, with that of Cromwell, and was buried in the same pit.

IRIA; a Basque word, signifying *town, city*.

IRIARTE, or **YRIARTE**, Thomas d'; a Spanish poet, born in 1752, and died in 1803. As a poet, he is known by his *Literary Fables* (1782), which have been translated into English, his poem *La Musica* (1784, 4to.), dramas, &c. His works were published in 8 vols., at Madrid, in 1805.

IRIDIUM; the name of a metal discovered in 1803, by Mr. Tennant, in the black residuum from the solution of the ore of platinum. Its name was bestowed in allusion to the rainbow (*iris*), in consequence of the changeable color it presents while dissolving in muriatic acid. Its color is white; it is brittle, and very difficult of fusion; specific gravity, 18.68. It is acted upon with difficulty even by the nitro-muriatic acid; but, when oxidized by digestion with it, it unites with other acids, and with the earths, particularly with alumine. It combines with sulphur, by heating a mixture of ammonia, muriate of iridium, and sulphur: the compound is a black powder, consisting of 100 iridium and 33.3 sulphur. Lead unites with this metal easily, but is separated by cupellation, leaving the iridium on the cupel, as a coarse black powder. Copper forms with it a very malleable alloy, which, after cupellation,

with the addition of lead, leaves a small proportion of the iridium, but much less than in the preceding instance. Silver forms with it a perfectly malleable compound, the surface of which is merely tarnished by cupellation; yet the iridium appears to be diffused through it in fine powder only. Gold remains malleable, and little altered in color, though alloyed with a considerable proportion; nor is it separable either by cupellation or quartation. Dr. Wollaston has observed, that, among the grains of crude platinum, there are some scarcely distinguishable from the rest, but by their insolubility in nitro-muriatic acid. They are harder, however, when tried by the file, not in the least malleable, and of the specific gravity of 19.5. These he concluded to be an ore consisting entirely of iridium and osmium.

IRIS; daughter of Thaumias and Electra (daughter of Oceanus), the sister of the Harpies, and the fleet, golden-winged messenger and servant of the gods, especially of Jupiter and Juno, who, in reward of her services, as tradition runs, transported her to heaven, in the form of a rainbow. She is represented as a beautiful virgin, with wings and a variegated dress, with a rainbow above her, or a cloud on her head exhibiting all the colors of the rainbow. The physical appearance of the rainbow is the foundation of this fable, conformably with the custom of the Greeks. The rainbow was believed to draw vapors up to the clouds from the sea and land, and to drink up the rivers with the head of an ox.—The ring of the eye, or the colored circle around the pupil of the eye, is also called *iris*; and *iris-stones* are specimens of crystal or quartz, which exhibit the colors of the rainbow.

IRIS, FLAG, or FLOWER-DE-LUCE; a genus of plants comprising upwards of 80 species, remarkable for their pointed, sword-shaped leaves, and their large and beautiful flowers. They constitute one of the chief ornaments of the northern regions of the globe, and usually grow in wet places, bearing flowers of various colors, but the prevailing tint of which is blue. Nine species are natives of the U. States, some of which possess active cathartic properties.

IRKUTSK; a Russian government in Asia, formerly containing two and a half million square miles, with a population of from 5 to 600,000 inhabitants. The present government, formed in 1823, is the eastern part of the former government; it contains 400,000 inhabitants, and reaches from 95° 40' E. longitude to the Northern Frozen

ocean and the Pacific ocean, forming the Russian frontier towards China. The soil is chiefly sterile, the climate cold. The mountain chains Sayanskie and Stanovoi render the face of the country uneven. The seas of Kamschatka and Okotsk, into which many promontories project, wash its coasts. In the warmest summer months only is navigation possible, and the communication with other countries is very much interrupted. The rivers are the Lena, Olonek, Anabara, Kolyma, Indigerka, which empty into the Icy sea; the Anadyr, Kamschatka, Argoun, Schilka, which empty into the Pacific ocean. The climate is various, but the winter is every where long. In the southern part, grain is raised, and some vegetables are produced in every district. The woods abound in bears; few cattle are raised; the reindeer are numerous, as are also sables, foxes and sea-otters. Swarms of mosquitoes molest man and beast. The waters contain many salmon, which make part of the food of the bears and wolves. The mineral kingdom is not destitute of precious metals, but they are little worked. The inhabitants are Russians, Tartars, Mongols, &c., in a low state of civilization. A circle of the government is also called Irkutsk, and the capital of both bears the same name. It was built in 1669, is situated on the Angara, and contains 33 churches, a theatre, several schools (a Japanese gymnasium, a garrison school, a seminary for priests, a printing-office, a library with 3000 volumes, &c.), soap boileries, manufactories of cloth, salt works, and has considerable commerce, as the entrepot for the fur trade with China. Population, 20,000. It is connected by its position with three commercial routes—that of Kiakta, that of eastern Siberia and Kamschatka, and that of western Siberia and Russia. The commerce carried on here is valued at \$800,000 annually. The furniture, ornaments, &c., from China, give this city a Chinese air. Lat. N. $52^{\circ} 16' 41''$; lon. E. $104^{\circ} 11' 41''$.

IRMINSUL (German, *Irmensäule*); a statue worshipped by the ancient Saxons, which represented a man completely armed in the fashion of the ancient Germans, with a banner in his right hand and a lance in his left. This statue was their most sacred idol, and is said to have stood in a holy grove at Eresburg, a principal fortress of the Saxons (near the present Paderborn). Charlemagne demolished this fortress in 772, and with it that monument of antiquity. The history and meaning of the Irminsul is very obscure: according to com-

mon opinion, it was erected in honor of Hermann, the deliverer of Germany (see *Arminius*); but it was probably the image of some distinguished divinity, perhaps of Woden himself, and the name of *Irmín* or *Hermann*, which signifies *man of war*, was attached to it, because Woden was the god of war.

IRON is the most valuable of all the metals. Though mentioned in the Pentateuch, we have reason to believe, from the facts that the fabrication of steel was unknown to the ancients, and that they were wholly destitute of metallurgical skill, that its uses were little known in the earlier periods of society. The Romans employed, as a substitute for it in their armor, an alloy of copper and tin. Its use has followed the progress of civilization in the world; and the amount of it consumed by any nation, at the present day, indicates very truly the degree of its advancement in the arts and sciences. The alchemical name of iron was *Mars*. In treating of this metal, we shall adopt the following order: its ores; their reduction to the metallic state; the chemical history of iron.

Ores of Iron. Iron exists in nature under four different states—the native state; that of an oxide; in combination with combustible bodies, particularly sulphur; and, finally, in the state of salts, as the sulphate, phosphate, and carbonate, of iron.—1. *Native Iron.* Natural malleable iron is a rare production of this globe, nearly all that has ever been found upon it having come to us from the atmosphere. It occurs in the form of a ramose stalactite, covered by brown, fibrous oxide of iron, mingled with quartz and clay, in a vein traversing a mountain of gneiss, near Grenoble, in France; also with spathic iron and heavy-spar, at Kamsdorf, in Saxony. More recently, it has been found in three places in the U. States—at Canaan, in Connecticut, in a small vein attached to a mass of gneiss upon a high mountain of the same rock; and in Pennsylvania and North Carolina: at the latter place, it was found loose in the soil, in a mass weighing more than 20 pounds. In neither of these cases was the iron perfectly pure. That from Saxony, besides 92.50 of iron, contained 6.0 of lead and 1.5 of copper; that of Canaan was slightly intermingled with carbon, so as occasionally to lose its malleability, approximating it to the character of steel; and that of Pennsylvania was alloyed with 1.56 per cent. of arsenic. A piece, weighing 7 oz., from the large mass of North Carolina, was crystal-

lized in the form of the regular octahedron, the surfaces of which exhibited a plaited structure: it was examined for other metals without success, though its imperfect malleability left no doubt of its containing a small proportion of arsenic. The meteoric iron differs very considerably from the terrestrial, native iron. Its color is a light steel-gray, resembling platina; it is easily cut with the knife, and it is flexible and perfectly malleable when cold. Specific gravity, 7.768. It occurs in large masses, sometimes of many tons weight, marked externally by impressions, like those produced by the hands and feet upon a soft, plastic mass; also in small globular and filiform masses, disseminated through meteoric stones. Occasionally, it presents imperfectly-formed octahedral crystals. A crystalline texture becomes visible, however, in cutting the large masses, and exposing the surfaces produced to the action of nitric acid, or allowing them to tarnish by heat. It invariably contains from 3 to 12 per cent. of nickel, and often traces of cobalt, neither of which metals have ever been found alloying terrestrial native iron. Meteoric iron is contained in all meteoric stones; in some, it exists in a very feeble proportion; in others, it forms one quarter of their weight; and again in others, it constitutes nearly the entire mass; while the largest masses of it ever found consist of it wholly, without the smallest mixture of foreign matters. In the two first-mentioned conditions, it has often been seen to fall from the heavens, while in the solid state, it never has been observed, by credible witnesses, to fall, but on one occasion, at Agram in Croatia. Some of the largest masses of meteoric iron known, are the following: that found by Pallas, in Siberia, weighing 1680 Russian pounds; that discovered by Rubin de Celis, in the district of Chaco-Gualamba in South America, and which weighs 15 tons; and that found near Red river, in Louisiana, weighing 3000 pounds, and which is now deposited in the collection of the lyceum of natural history in New York. Besides these, other very considerable pieces have been noticed in Africa, Mexico and Bohemia. (For additional particulars concerning meteoric iron, and its origin, see *Meteoric Stones*.) Meteoric iron has been worked, as an object of curiosity, into knives, swords, and other instruments.—2. *Magnetic Iron Ore*, or *Oxydulated Iron*, is of an iron-black color, more intense than belongs to metallic iron; its powder is of a pure black. It occurs crystallized, in the form of the regular octahedron, which is

its fundamental form; it usually, however, presents itself in large lamelliform masses, with distinct octahedral cleavages, in granular concretions, or compact. It is brittle, has the hardness of feldspar, and a specific gravity of 5.094. It exerts a decided action on the magnetic needle; and certain specimens, especially of a compact variety, attract and repel, alternately, the poles of a needle, according as we present the same point of a fragment of the ore to one or the other of the extremities of a needle. This variety, which is found in Warwick, Orange county, New York, and at several places in New Jersey, as well as in other countries, is called the *native loadstone*. Its magnetic virtue strengthens by exposure to the air. The magnetic iron consists of 28.14 protoxide of iron, and 71.86 of peroxide of iron. It is infusible before the blow-pipe, but assumes a brown color, and loses its attractory power, after having been exposed to a great heat. It is soluble in nitric acid, and may be obtained crystallized by fusing it, as often happens in the roasting of it, in furnaces, to effect its reduction. It occurs in primitive rocks, chiefly in gneiss, mica-slate, hornblende-slate, and chlorite-slate, and rarely in limestone, when it forms veins, beds, or even entire mountains. It also composes the chief ingredient of certain sands, which have been washed and deposited by the same currents which separated it from its original beds. The different varieties of this ore are exceedingly rich in metal, often yielding 80 per cent. of iron, and are every where explored, when found in sufficient quantities, and connected with abundance of fuel and facility of transportation. In Sweden, it forms the object of numerous important explorations, among which may be cited that of the mountain of Taberg, near Jonkoping, in Smoland, where it is so abundant as to be worked under the open sky; that of the island of Utoe, where excavations extend to a great distance under the contiguous sea; that of Dannemora, in Upland, which is at present under the control of the English; that of Gallivara, beyond the polar circle, where the ore forms an entire mountain; and, finally, those immense deposits of ferruginous sand which are so extensively wrought in Dalecarlia, in Smoland and in Wermland. The oxydulated iron is also explored at several places in Siberia, Piedmont, and the kingdom of Naples. In the U. States, it exists in the greatest abundance, and is wrought at numerous localities. The primitive range of moun-

tains upon the western side of lake Champlain, affords numerous veins and beds of it, sometimes more than 20 feet in thickness, and little intermingled with foreign substances. The principal works for its reduction are at Peru, and near Crown Point. A valuable deposit of the compact magnetic iron, precisely similar to that worked at Dannemora in Sweden, occurs at Franconia in New Hampshire, upon a small mountain of gneiss, belonging to the White mountain range. In the Highlands of New York, it forms numerous beds, as also in their continuation through the northern part of New Jersey to the Delaware river, and is worked extensively at Munroe, Hamburg, and many other places. The present ore forms the best iron which is made for the manufacture of steel; and hence the employment of Swedish iron by the English for this purpose.—3. *Chromated Oxide of Iron* (*Chromate of Iron*) is found crystallized in regular octahedra, and massive. Lustre, imperfectly metallic; color, between iron-black and brownish-black; streak, brown; opaque; brittle; hardness, the same with the preceding species; specific gravity, 4.498. Vauquelin and Klaproth make it consist of

Oxide of chrome,	43.00	..	55.50
Protoxide of iron,	34.70	..	33.00
Alumina,	20.30	..	6.00
Silica,	2.00	..	2.00

Alone, before the blow-pipe, it is infusible, but acts upon the magnetic needle, after having been exposed to the reducing flame. It is dissolved when heated with borax, to which it imparts a beautiful green color. It was first found in the department Du Var, in France, in the form of nodules and kidney-shaped masses. It was afterwards discovered in Stiria and Scotland; at the former place, imbedded in serpentine, at the latter, in limestone. In the U. States, it exists abundantly in Maryland, near Baltimore; also, in small quantities, in Connecticut, near New Haven, in limestone, with serpentine. It is a highly valuable mineral, when it occurs in quantity, for extracting the oxide of chrome, which is employed either alone or in various combinations with the oxides of other metals, as cobalt, lead, mercury, &c., both for painting on porcelain, and for painting in oil. The quantity of chromate of lead, or chrome yellow, manufactured in Baltimore annually, is estimated at 50,000 pounds. (See *Chrome*).—4. *Specular Iron Ore*, and *Red Iron Ore*. This species, scarcely less interesting than the last in economical importance, presents many difficulties to the mineralogist, in conse-

quence of the complicated forms of its crystals, and the diversified appearance of its compound varieties. It is crystallized in a great number of forms, whose fundamental figure is a slightly-acute rhomboid of $86^{\circ} 10'$ and $93^{\circ} 50'$, which may be derived from its crystals by cleavage. The general tendency of its secondary forms is to hexagonal prisms and irregular octahedra. Lustre, metallic; color, dark steel-gray, iron-black; streak, cherry-red, or reddish brown; surface of the crystals frequently tarnished; opaque, except in very thin laminæ, which are faintly translucent, and show a deep blood-red color; brittle; hardness, the same with the preceding species; specific gravity, 5.251. Its action upon the magnet is feeble; it never attracts iron-filings, or offers magnetic polarity. Besides occurring in distinct crystals, and in lamelliform and compact masses, with a metallic lustre, it also presents itself in reniform, botryoidal and stalactitic shapes, and earthy-looking masses, where, from the smallness of the individuals, no signs of the metallic appearance are discernible. These varieties have received distinct names, and have often been treated of, in mineralogical systems, as belonging to a distinct species, which, on account of their color, has been designated *red iron ore*. But this distinction is now given up, as an uninterrupted transition has been noticed between all the varieties of the red iron ore and the crystalline specular iron. The following are some of the varieties of the present species, according as they have acquired distinct appellations in mineralogical books, and among mankind in general: that in distinct crystals is called *specular iron*; that in thin, lamellar concretions, with a metallic lustre, is called *micaceous iron*; the rest, with a metallic lustre, is denominated *common specular iron*. Those varieties which have lost their metallic appearance, are included within, 1. the red iron ore, divided into *fibrous red iron ore*, or *red hematite*; *compact* and *ochrey red iron ore*, which are massive, and consist of impalpable granular individuals, more or less firmly connected; and *scaly red iron ore*, or *red iron froth*, consisting of very small, scaly, lamellar particles, which, in most cases, are but slightly coherent: 2. clay iron ore, divided into *reddle*, which possesses an earthy, coarse, slaty fracture, and is used as a drawing material; *jaspersy clay iron ore*, which has a large, flat, conchoidal fracture, and considerable hardness when compared with the other varieties of red iron ore; and *columnar* and

lenticular clay iron ore, which are distinguished, the first by the columnar form, the latter by the flatish, granular form of its particles. The micaceous iron, analyzed by Bucholtz, and the red hematite, analyzed by D'Aubuisson, have been found to consist of

Peroxide of iron, 100.00	90.00	94.00
Oxide of manganese, 0.00	a trace	a trace
Silica,	0.00	2.00
Lime,	0.00	a trace
Water,	0.00	2.00
		3.00

The proportion of metal to that of oxygen, in the species, is as 69.34 : 30.66. The clay iron ores, being more or less mixed with earthy substances, vary in their contents, and several of their properties are dependent upon the nature of these admixtures. The specular iron is infusible before the blow-pipe, but melts with borax, and forms a green or yellow glass, like pure oxide of iron. It is likewise soluble in heated muriatic acid. The specular iron (in the crystalline, lamelliform and compact varieties, with a metallic lustre) forms very powerful beds, and even entire mountains, which are traversed by a multitude of fissures, and cavities lined with small, but exceedingly brilliant crystals of this substance. It yields, in the ordinary operations of reduction, 60 per cent. of metal. Its most celebrated locality is the island of Elba, which has afforded iron for 16 centuries. Its mines are still believed to be inexhaustible. They annually yield 32,000,000 of French quintals of ore, which are transported for reduction into Tuscany, the Roman states, Liguria, and the kingdom of Naples. It is also found at Framont in the Vosges (where its exploration occupies 200 miners), in Saxony, Bohemia, Sweden, Siberia, and in the U. States, at Hawley in Mass. Wherever it exists, it is exploited with profit. It deserves to be mentioned, also, that specular iron, in exceedingly brilliant crystals and scales, occurs very frequently among the ejected matter of volcanoes, as in the lavas of Vesuvius and Auvergne, where it is, undoubtedly, a product of sublimation. The red hematite is found in beds and veins, in primitive and secondary countries. It occurs abundantly in Saxony, the Hartz, Silesia, and in England. In the U. States, it is found very sparingly, and is nowhere reduced for the metal. It occurs at Ticonderoga, N. Y., where it is ground to powder, and employed as a polishing substance. It affords excellent iron, and often in the large proportion of 60 per cent. Most of the plate iron and iron wire of England are made of it. In

Scotland, it is used, along with the ore of that country, at the Carron and Glasgow works. The ochrey red iron ore usually accompanies the other varieties of this species, and is treated conjointly with them. In places where it is found in considerable quantities, it is sometimes collected, washed, and employed as a polishing substance. The compact red iron ore is found in France and some other European countries, where it is reduced, and affords a good soft iron, yielding 50 per cent. of metal. But its most important use is as a polisher. It forms, when perfectly compact, the burnisher of the button-maker, by means of which he imparts to gilded buttons the highest polish of which they are capable. The best specimens for button-polishers command a very high price, and usually come from little pebbles and rolled masses of this ore, found in secondary countries. Those most esteemed have hitherto been brought from Spain. There are strong indications, however, that it exists dispersed through the soil near Marietta, in Ohio. The lenticular or scaly red iron ore abounds in the secondary region of New York, forming a thin stratum near the surface of the ground. It is wrought at Utica, as well as at many other places.—5. *Hydrous Oxide of Iron*, and *Brown Iron Ore*. The present is a species nearly parallel to the foregoing, in the quantity of iron it affords to society. It is very rarely observed in distinct crystals, more usually occurring in botryoidal and stalactical masses, consisting of closely aggregated fibres, in which respect it resembles the most common varieties of the specular iron. The crystals are very small, externally black and brilliant, and in the shape of right rectangular prisms. The general character of the species is as follows: lustre, adamantine; color, various shades of brown, of which yellowish-brown, hair-brown, clove-brown and blackish-brown are the most common; streak, yellowish brown; brittle; no action on the magnet; scratched by feldspar; specific gravity, 3.922. Besides occurring in crystals, and in globular stalactical and fruticose shapes, it is found in masses whose composition is impalpable; sometimes, also, the particles are so slightly coherent, that the mass appears earthy and dull. It differs, chemically, from the specular iron, in containing a quantity of water, not merely interspersed through its substance by simple absorption, but intimately combined with it by chemical affinity. According to D'Aubuisson, it consists of (in two analyses)

Peroxide of iron,	82.00	84.00
Water,	14.00	11.00
Oxide of manganese, . .	2.00	2.00
Silica,	1.00	2.00

the proportion of peroxide of iron and water being as 85.30 to 14.70. Before the blow-pipe, it becomes black and magnetic. It melts, with borax, into a green or yellow glass, and is soluble in heated nitro-muriatic acid. The division introduced among the varieties of the present species, is somewhat similar to that which has been given to red iron ore. *Crystallized hydrous oxide of iron* embraces the small black crystals, which sometimes occur in fibrous and radiating bundles. *Crystallized brown iron ore* is that variety which presents itself in the form of the cube, rhomboid, or some modification of these forms, and does not properly belong to this species, being decomposed varieties of iron pyrites and spathic iron, to which they are more correctly referred. The *fibrous brown iron ore*, or *brown hematite*, contains the fibrous varieties, in stalactitic, reniform, and other imitative shapes. *Compact brown iron ore* comprehends those imitative shapes and massive varieties, in which the composition or fibrous structure is no longer observable; while *ochrey brown iron ore*, or *bog iron ore*, is applied to those which have an earthy texture and are friable. As impure varieties of the species, we must consider some of the clay iron ores, such as the *granular*, the *common*, the *pisiform*, and the *reniform* clay iron ore. The granular variety is composed of compact, roundish, or globular masses; the reniform one, of alternating coats, of different color and consistency, disposed in a reniform surface. In the pisiform variety, we meet with a similar composition, only in small globules, parallel to the surface of which the lamellæ are disposed. The compact pisiform clay iron ore, however, does not belong to the present species, but it is decomposed iron pyrites, as is demonstrated, not only by the crystalline forms which it affects, but likewise from the nucleus of the undecomposed pyrites, which the largest specimens of it often embrace. The crystallized hydrous oxide of iron is found, in limited quantities, in England, France and Siberia; it either occurs in quartzose geodes, in the form of mamillary masses, or is enclosed in quartz crystals. The fibrous brown iron ore is the most abundant and widely dispersed of all the varieties of this species. It is commonly found in large beds, in gneiss or mica-slate, and very frequently in immediate connexion

with granular limestone. It is also found in Saxony and Thuringia, in beds and veins, embraced, in some instances, in newer rocks. It is uncommon in the northern countries of Europe; but in Germany, France, and the Austrian dominions, it is wrought in great abundance. Its most remarkable deposit in the U. States, is at Salisbury in Conn., where it has been wrought for nearly 100 years; the amount of pig iron yielded annually, at present, is about 2000 tons. Many other localities of brown hematite exist in Litchfield, Conn., as well as in the contiguous counties of Dutchess, N. Y., and Berkshire, Mass. The iron which this variety affords is superior in malleability to that yielded by the red ore of iron, and is much esteemed, also, on account of its toughness and hardness. The pig iron obtained from melting its purer varieties with charcoal, in particular, may be easily converted into steel. The compact variety of this species is usually found in the same localities with the fibrous hematite, and is equally employed with that variety for obtaining iron. The ochrey brown iron ore, or bog iron ore, is the most recent in its formation of all the ores of iron, its deposition being continually going on, even now, in shallow lakes and in morasses. It is wrought in all countries, more or less extensively; but the iron it yields is chiefly used for castings. The pisiform clay iron stone occurs imbedded in secondary limestone, in large deposits, in France and Switzerland, where it supplies considerable iron works; but the iron, like that from the other earthy varieties of the present species, is generally too brittle to be wrought into bar-iron.—6. *Arsenical Iron*, or *Mispickel*, is found crystallized in right rhombic prisms of $111^{\circ} 12'$ and $68^{\circ} 48'$. These are often terminated by dihedral summits, and liable to a large number of modifications. It also occurs massive. Lustre, metallic; color, silver-white, inclining to steel-gray; streak, dark grayish-black; brittle; hardness, nearly that of feldspar; specific gravity, 6.127. Its chemical composition is, iron 33.5, arsenic 46.5, and sulphur 20. Before the blow-pipe, upon charcoal, it emits copious arsenical fumes, and melts into a globule, which is nearly pure sulphuret of iron. It is soluble in nitric acid, with the exception of a whitish residue. It sometimes contains a small proportion of silver; when it is denominated *argentiferous arsenical pyrites*. Arsenical iron is a pretty abundant substance, and occurs both in beds and veins, often accompanied by ores of silver, lead and

zinc. It is very plentiful in the mining districts of Saxony, in the silver mines of Joachimsthal and the tin mines of Schlagsenwald; also in the Hartz, Sweden and Cornwall; in the U. States, at Franconia in New Hampshire, with copper and iron pyrites, in gneiss; at Worcester, in Mass., with spathic iron ore and blende, in quartz; at Chatham in Conn., with arsenical cobalt, in gneiss; and in Edenville, in New York. The accidental admixture of silver renders some varieties of the present species useful as ores of that metal. The common arsenical pyrites, when occurring in large quantities, is employed in the manufacture of white arsenic and of realgar.—7. *Axotomous Arsenical Pyrites*; a species differing from the preceding in the inclination of the lateral faces, which, in the present case, meet under angles of $122^{\circ} 26'$ and $57^{\circ} 34'$, and in specific gravity, which in this species is 7.228. It has not yet been analyzed, but is believed to consist wholly of iron and arsenic. It has been found in beds, in primitive mountains, in Carinthia, Silesia and Stiria.—8. *Iron Pyrites* is the most universally distributed of all the ores of iron, and, from its yellow color and metallic aspect, is the substance which is so frequently mistaken, by ignorant people, for gold. It is not uncommon to find it regularly crystallized, though the dimensions of the crystals are rarely such as to render them very conspicuous. The prevailing figure among its crystals is the cube, parallel to whose faces they may be cleaved, as also parallel to the sides of the regular octahedron. The last is assumed as the primitive form of the species by most mineralogists, as leading to an explanation of the numerous secondary forms with the greatest simplicity. The most frequent of these secondaries are the cubo-octahedron, the pentagonal-dodecahedron, and the icositetrahedron. The surfaces of the crystals are sometimes smooth, and sometimes alternately streaked. Fracture, conchoidal, uneven; lustre, metallic; color, passing through a few shades of a characteristic bronze yellow; streak, brownish-black; brittle; hardness, such as to be impressed with the knife, and scratched by feldspar; specific gravity, 4.98. The crystals are liable to be much grouped, often penetrating each other so as to form globular masses. It occurs, also, in granular, columnar and impalpable masses; and often cellular, in consequence of forming upon crystals of galena, which have subsequently become decomposed. Iron pyrites consists of iron 45.74, and sulphur

54.26. In the exterior flame of the blow-pipe, it becomes red upon charcoal, the sulphur is driven off, and oxide of iron remains. In heated nitric acid, it is partly soluble, and leaves a whitish residue. Some varieties are subject to decomposition, when exposed to the action of the atmosphere. With regard to its geological relations, much diversity obtains; it constitutes beds by itself of considerable magnitude, in gneiss, mica-slate, and primitive argillite, and is often an important ingredient of those beds which contain ores of lead, iron, copper, &c. It is frequently mixed with coal seams and the beds of clay which accompany them. It is also met with, in considerable quantities, in veins, associated with blende, arsenical iron, galena and copper pyrites. It is found, likewise, with ores of silver, and is contained in many organic remains, both of vegetable and animal origin. Its localities are too numerous to admit of being noticed with particularity. Some of the most beautiful crystallizations which adorn mineralogical cabinets, are brought from the island of Elba, Piedmont, Saxony, Hartz, Norway and Cornwall. Vast deposits of iron pyrites, intermingled, in some instances, with magnetic iron pyrites, are found in the U. States, among which may be mentioned those in Vermont, at Strafford and Shrewsbury; in Massachusetts, at Hubbardston; in Maryland, near Baltimore; in Ohio, near Zanesville; and the state of Tennessee. It also abounds in the gold region of the Southern States, and is wrought extensively in many places for the sake of the gold mechanically mixed with it, from the presence of which it receives a golden-yellow tinge. The uses of this species are as follows: it is roasted for extracting sulphur; after having been exposed to the oxidating influence of the atmosphere, it yields sulphate of iron, or coppers, and sulphuric acid; the remaining oxide of iron is used as a coarse pigment; it is an important agent in several metallurgical operations, and was formerly considerably employed instead of flints in gun-locks, from whence the name *pyrites* was derived.—9. *White Iron Pyrites* differs from the preceding species in its crystalline characters, as well as in some other respects, though, in chemical constitution, the two appear to be perfectly identical. Its crystals are in the form of modified rhombic prisms, and of very flat crystals, having the appearance, at first sight, of dodecahedrons with triangular planes, but which, however, are macles, consisting of similar portions of five crystals. The pri-

mary form is a right rhombic prism, of about 106° and 73°, parallel to the planes of which it yields to mechanical division. The faces of the crystals are deeply streaked, in a vertical direction. Lustre, metallic; color, pale bronze-yellow, inclining to gray; streak, grayish-black; hardness, equal to that of feldspar; specific gravity, 4.67. It occurs massive, and in various imitative shapes, in consequence of which, and the composition of its crystals, it has been distinguished into several varieties, as *radiated pyrites*, *spear pyrites*, *cock's-comb pyrites*, *hepatic pyrites*, and *cellular pyrites*. Before the blow-pipe, it behaves like common iron pyrites. Some of its varieties are peculiarly subject to decomposition. It is less frequently met with in nature than the preceding species, though very often found accompanying it. It occurs more frequently in rocks of the coal formation, and in strata of clay. It is not abundant in the U. States; its principal localities are in France, Bohemia, and Hessia. It is useful for the manufacture of sulphur, sulphuric acid and copperas.—10. *Magnetic Iron Pyrites* is rarely seen in well formed crystals. Count Bournon describes it as occurring in irregular six-sided prisms. In general, it is massive and foliated, or fine granular. Lustre, metallic; color, intermediate between bronze-yellow and copper-red; streak, dark grayish-black; subject to tarnish; slight action on the magnet; brittle; hardness, considerably inferior to that of common iron pyrites, or that of white iron pyrites; specific gravity, 4.63. It consists of iron 62.77, and sulphur 37.23. It occurs in beds, along with other minerals, usually in primitive rocks. It exists plentifully at Bodenmais, in Bavaria, and several districts of Stiria. In the U. States, it occurs at Munroe in Conn., at Lane's mine, in quartz, along with blende, galena, tungsten, &c.; and in Vermont, at Strafford and Shrewsbury, along with iron pyrites. Its uses are the same as have been mentioned in connexion with the other species of iron pyrites.—11. *Phosphate of Iron*, or *Vivianite*, occurs crystallized, in the form of a right oblique-angled prism of 125° 18' and 54° 42', which is that of the primary crystal. The crystals are long and slender for the most part, though generally very small. They are attached to their gangue by one of their broad lateral planes, or occur in aggregated groups. Lustre, pearly, approaching to metallic on certain faces; on others, vitreous; color, pale blackish-green, sometimes approaching indigo-blue; streak,

bluish-white; the powder produced by crushing the mineral in a dry state, is liver-brown; translucent, and rarely transparent; sectile; thin laminae are flexible; specific gravity, 2.66. It also occurs massive, in small, reniform and globular shapes, and imbedded nodules; also in superficial coatings of dusty particles. The earthy varieties are dull, opaque, meagre to the touch, and light. Their color, on first exposure to the light, is grayish, yellowish, or greenish-white, or some pale tinge of blue; but it soon passes to a dark indigo-blue. In two varieties of vivianite (a friable one analyzed by Klaproth, and a crystallized one from Bodenmais in Bavaria, by Vogel), the following chemical composition was discovered:

Protoxide of iron, . . .	47.50	..	41.00
Phosphoric acid,	32.00	..	26.40
Water,	20.00	..	31.00

It decrepitates before the blow-pipe, but melts, if first reduced to powder, into a dark-brown or black scoria, which moves the magnetic needle. It is soluble in dilute sulphuric and nitric acids. It occurs in a variety of geological situations. The crystals are found in copper and tin veins, and sometimes in greywacke accompanying native gold; also in basalt and trap rocks. The earthy and massive varieties are imbedded in clay, and often accompany bog iron ore. The crystalline varieties come from Cornwall and Bavaria; the foliated and earthy varieties abound (especially the former) in the U. States, in Monmouth county, New Jersey. It is confined to argillaceous and ferruginous deposits, and is sometimes found in connexion with bones, and very usually filling up the casts of belemnites and other fossils. The earthy vivianite is sometimes employed as a pigment.—12. *Arseniate of iron* occurs in small cubic crystals, which are either unmodified, or have their alternate angles or their edges truncated. Lustre, adamantine, not very distinct; color, olive-green, passing into yellowish-brown, bordering sometimes upon hyacinth-red and blackish-brown, also into grass-green and emerald-green; streak, similar to the colors; translucent on the edges; rather sectile; scratched by fluor; specific gravity, 3.00. According to two analyses, it consists of

Oxide of iron,	45.50	..	48.00
Arsenic,	31.00	..	18.00
Oxide of copper,	9.00	..	0.00
Silica,	4.00	..	0.00
Carbonate of lime,	0.00	..	2.00
Water,	10.50	..	32.00

Exposed to a gentle heat, its color is

changed into red. In a higher degree of temperature, it intumesces, gives little or no arsenic, and leaves a red powder. Upon charcoal, it emits copious fumes of arsenic, and melts, in the inner flame, into a metallic scoria, which acts upon the magnetic needle. It principally occurs in veins of copper ores, traversing the older rocks, and its chief localities are Cornwall and Saxony.—13. *Carbonate of Iron*, or *Spathic Iron Ore*, occurs crystalline and massive. Its crystals are acute rhomboids, sometimes perfect, or only having the terminal angles replaced, six-sided prisms, and lenticular crystals. They are very easily cleavable, yielding obtuse rhomboids of 107° and 73° . Lustre, vitreous, inclining to pearly; color, various shades of yellowish-gray, passing into ash and greenish-gray, also into several kinds of yellow, white and red; streak, white; translucent in different degrees; brittle; hardness, nearly identical with that of fluor; specific gravity, 3.829. It occurs massive, in broad, foliated and granular masses; also in fibrous botryoidal shapes, whence it has received the name of *sphaerosiderite*. Two varieties of this species, 1. the sphaerosiderite, and 2. a cleavable variety from Newdorf in the Hartz, have yielded to Klaproth,

	(1.)	(2.)
Protoxide of iron, . . .	63.75	57.50
Carbonic acid,	34.00	36.00
Oxide of manganese, . . .	0.75	3.30
Lime,	0.00	1.25
Magnesia,	0.52	0.00

Before the blow-pipe, it becomes black, and acts upon the magnetic needle, but does not melt. It colors glass of borax green. It is soluble with difficulty in nitric acid, particularly if not reduced to powder. On being exposed to the air, it is gradually decomposed: first the color of the surface becomes brown or black; afterwards, also, the streak is changed into red or brown; hardness and specific gravity are diminished; and even the chemical constitution is altered, the whole being converted into hydrate of iron. It frequently occurs, along with carbonate of lime, in veins and beds, in primitive rocks; also in metalliferous veins, accompanied by galena, gray copper ore, and iron and copper pyrites. Immense beds of it exist in Stiria and Carinthia, as well as in France, Switzerland, and Siberia. In the U. States, we have a powerful vein of it at New Milford in Conn., crossing, with the breadth of six feet, an entire mountain; and in Vermont, at Plymouth, an apparently rich deposit of this ore has, within a few years, been opened. In France,

Stiria and Carinthia, large quantities of cast and wrought iron are obtained from the sparry iron ore, but particularly steel, for the production of which it is highly valuable.—14. *Oxalate of Iron*, or *Humboldtine* is an ore of iron found near Berlin, in Bohemia, in a moor-coal, or friable lignite. It consists of protoxide of iron 53.56, and oxalic acid 46.14. It is supposed to owe its origin to the decomposition of succulent plants. It occurs in small flattish masses, of a light yellow color; is soft, yielding to the nail, and of the specific gravity of 1.3. By rubbing, it acquires resinous electricity. It decomposes easily on live coals, giving out a vegetable odor. It is insoluble in boiling water and alcohol.—15. *Sulphate of Iron*, or *Copperas*. This salt is not frequently found in nature, in distinct crystals, but usually occurs in stalactitic, botryoidal and reniform masses, and occasionally pulverulent. The crystals are in the form of right oblique-angled prisms, considerably modified by replacements; fracture, conchoidal; lustre, vitreous; color, several shades of green passing into white; streak, white; semitransparent and translucent; brittle; hardness, that of gypsum; specific gravity, 1.83; taste, sweetish-astringent and metallic. It consists of

Oxide of iron,	25.7
Sulphuric acid,	28.9
Water,	45.4

It is easily soluble in water, and the solution becomes black on being mixed with tincture of galls. If exposed to the open air, it soon becomes covered with a yellow powder, which is persulphate of iron. Before the blow-pipe, it becomes magnetic, and colors glass of borax green. In most instances, it is produced by the decomposition of other minerals, particularly of iron pyrites and magnetic iron pyrites; and the crystallized varieties are rarely found, except in those places where artificial heaps of these substances have been formed. It is also found incrusting slate rocks, and dissolved in the waters of certain mines. In the U. States, it is often observed, especially in New England, upon the surface of mica-slate rocks, in thin coatings, and is sometimes made use of for dyeing, without being redissolved and crystallized.

Treatment of the Ores.—Of the 15 species of iron ore just described, but four are employed for obtaining metallic iron and steel, viz., magnetic iron ore, specular iron ore, brown iron ore, and carbonate of iron. The metallurgical details belonging to the treatment of these ores,

cannot be described within the limits of the present work. We shall therefore merely give some general notions of the processes to which they are subjected for obtaining the metal in question. After raising, the ores are picked, to separate, as far as possible, the considerable pieces of earthy or otherwise refractory matters with which they may be associated. They are next submitted to a roasting, in large heaps, in the open air, to expel the sulphur and arsenic which they may contain, as well as to render them more friable and easy of further reduction to powder. The roasting is performed, in England, generally by bituminous coal, which is, at the same time, converted into coke; but the ores of the continent of Europe and of the U. States are roasted by charcoal and wood fires. Large trunks of trees are laid at the bottom, upon which brushwood and charcoal are thrown and ignited, over which the ore is heaped to the height of several feet, occasionally with alternating layers of charcoal. The result of the operation is, that the ore becomes full of fissures, friable, and loses altogether its vitreous lustre. It is now transferred to the crushing-mill, where it undergoes a further pulverization, after which it is transported to the smelting furnace, to be converted into iron. Here it passes through two distinct operations—1. the reduction of the oxide to the metallic state; 2. the separation of the earthy matters in the form of scoria. These processes consist in exposing the ore, ordinarily mixed with certain fluxes, to the action of carbon, at an elevated temperature, in furnaces urged by bellows, hence called *blast-furnaces*, or sometimes *high furnaces*. These furnaces vary in height from 12 to 60 feet, and have, externally, the shape of a four-sided pyramid, truncated at top, and terminating in a cylindrical chimney, whose internal diameter is from four to six feet. The interior body of these furnaces is usually in the circular form, except the laboratory at its bottom, where the liquid metal gathers. This, called sometimes the *crucible*, or *hearth*, is a right-rectangular prism, oblong in the direction perpendicular to the blast orifices, or tuyeres of the bellows. The sides of the crucible are commonly made of a fine gritstone, composed of quartzose grains, which, in the U. States, is a mica-slate, or gneiss rock, in which quartz is the chief ingredient. Above the crucible the boshes are placed, in the form of an inverted quadrangular pyramid, approaching to the prismatic shape; and above

these stone boshes rises the conical body of the furnace, lined with fire-bricks, contracting as it ascends, like the narrow end of an egg, until it terminates in the chimney. The entire furnace is built in a very solid manner, and strengthened by bands and cross bars of iron. The bellows are usually cylindrical, and their pistons worked either by water or a steam-engine. The blast-holes, which are situated in the upper part of the crucible, are two in number, and frequently placed on opposite sides, but so angled that the currents of air do not impinge on each other. At the lower part of the crucible are openings for the discharge of the metal and scoria. These openings are kept stopped by accumulations of clay and sand upon the exterior when the furnace is in operation. The process of reduction commences by first gradually heating up the furnace, until it will bear to be filled entirely with fuel, after which, as the contents of the furnace begin to sink, alternate charges of ore mingled with flux, and of charcoal or coke, are added; the blast is let on, and the metal in the ore, parting with its oxygen, flows by degrees, and subsides to the bottom of the crucible covered with a melted slag. The slag is occasionally allowed to flow off by removing the clay from some one of the apertures in the crucible; and when the bottom of the furnace becomes filled with the metal, which it ordinarily does, after a space of 9 or 12 hours, the iron itself is discharged, by one of these openings, into a fosse of sand mingled with clay. As soon as the iron has flowed out the aperture is closed again; and thus the furnace is kept in incessant activity during the first six months in the year, the other six months being usually employed in repairing the furnaces, making charcoal, and collecting the requisite provision of wood and ore. The flux employed to assist the fusion of the ore, by vitrifying the earths associated in it with the oxide of iron, is limestone of the best quality. The iron which has run out from the blast furnace is in the condition of cast iron, or iron with a considerable portion of carbonaceous matter intermingled with its particles, and a small proportion of oxygen, from which causes it has a coarse grain, and is brittle. In converting it into bar iron, it undergoes one or the other of the following processes, ordinarily according as charcoal or coke is employed. In the former case, a furnace is made use of resembling a smith's hearth, with a sloping cavity sunk from 10 to 12 inches below

the blast-pipe. This cavity is filled with charcoal and scoria, and on the side opposite to the blast-pipe is laid a pig of cast iron, well covered with hot fuel. The blast is then let in, and the pig of iron, being placed in the very focus of the heat, soon begins to melt, and, as it liquefies, runs down into the cavity below. Here, being out of the direct influence of the blast, it becomes solid, and is then taken out and replaced in its former position, the cavity being again filled with charcoal. It is thus fused a second time, and after that a third time, the whole of these three processes being usually effected in between three and four hours. As soon as the iron has become solid, it is taken out and very slightly hammered, to free it from the adhering scoria. It is then returned to the furnace, and is placed in a corner, out of the way of the blast, and well covered with charcoal, where it remains till, by further gradual cooling, it becomes sufficiently compact to bear the tilt, or trip-hammer, whose weight varies from 600 to 1200 pounds, and which is moved by water. Here it is well beaten till the scoria are forced out, and is then divided into several pieces, which, by a repetition of heating and hammering, are drawn into bars, and in this state it is ready for sale. The proportion of pig iron or cast iron from a given quantity of ore is subject to considerable variation from a difference in the metallic contents of different parcels of ore, and other circumstances; but the amount of bar iron that a given weight of pig iron is expected to yield, is regulated very strictly, the workmen being expected to furnish four parts of the former for five of the latter, so that the loss does not exceed 20 per cent. The other process for the manufacture of bar iron, and which is the one chiefly employed in England, is executed in part in reverberatory furnaces, known by the name of *puddling furnaces*. The operation commences with melting down the cast iron in refinery furnaces, like the one above described. When the cast iron is fully melted, a tap-hole is opened in the crucible, and the fine metal flows out, along with the slag, into a fosse bedewed with water mixed with clay, which forms a coating, to prevent the metal from sticking to the ground. The finer metal forms a plate 10 feet long by 3 feet broad, and from two inches to two and a half thick. A great quantity of cold water is sprinkled on it, in order to make it brittle, and also to oxidize it slightly. The loss of

weight, in the iron, by this operation, is from 12 to 17 per cent. It is broken to pieces, and laid on the hearth of a reverberatory furnace, in successive portions, being heaped up towards its sides in piles which mount near to the roof. The middle space is left open, to give room for puddling the metal as it flows down in successive streams. When the whole is reduced, by the heat of the furnace, to a pasty state, the temperature is lowered, and a little water is sometimes thrown on the melted mass. The workman stirs about the semi-liquid metal with his puddle, during which it swells up, emits a considerable quantity of oxide of carbon, which burns with a blue flame, so that the mass appears to be on fire. The metal, as it refines, becomes less fusible, or, in the language of the workmen, it begins to *dry*. The puddling is continued till the whole charge is reduced to the state of an incoherent sand; then the temperature is gradually increased, so as to impart a red-white heat, when the particles begin to agglutinate, and the charge *works heavy*. The refining is now finished, and nothing remains, but to form the metal into balls, and condense it under the rolling cylinders, an operation formerly, and still sometimes performed under trip-hammers, but with much less expedition. When the lump of iron has passed five or six times through the grooved rollers, it assumes an elliptic figure, and is called a *bloom*. Loose fragments of the ball, with the slag, fall down about the cylinder. The metal thus roughed down is called *mill bar iron*. It is subjected to a second operation, which consists in welding several pieces together, whence it derives the valuable properties of ductility, uniformity and cohesion. After welding laterally four pieces together, the mass is run through between a series of cylinders, as at first, and becomes English bar iron. Iron, for laminating into sheets, is treated in the refinery furnace with a charcoal, instead of a coke fire. The objects of these operations, as respects the treatment of cast iron, to convert it into tough iron, it is obvious, are to get rid of the slag, the oxygen, and the carbon, it contains. The first of these is separated, in part, by the long-continued fusion and the repose of the melted metal, in consequence of which the slag, being lighter than the bath, floats on its surface; but its more effectual removal is produced by the compression, in which process the earthy glasses are forced through the pores of the bloom, or lump, as water

exudes from a sponge. Among the different varieties of cast iron, there are some which contain exactly the proportion of oxygen and carbon proper to form a gaseous combination. For the refinery of these, an elevated temperature, without access of air, is all that is necessary. These elements, reacting upon one another, are dissipated in the aerial state; but there are likewise other varieties of cast iron, in which the carbon is in excess. In this case, the free access of atmospherical air is requisite. In order to understand how the carbon is abstracted from the interior of a mass of the liquefied metal by the oxygen of the atmosphere, which can only be in contact with the surface of the iron, we have merely to reflect upon the reverse process in the manufacture of steel, which consists in the propagation of carbon into iron. At first, an outer coat of iron, by being surrounded with charcoal powder, gets partially saturated with carbon. If, by pushing the cementing process, we wish to arrive at the complete saturation of that coat, we can succeed only by making a previous partition. The layer immediately beneath the first carries off from it a portion of its carbon; and it is not till itself is partly saturated, that it suffers the outer coat to absorb its maximum dose of carbon, when it remains stationary; but an effect quite similar takes place with the second coat in reference to the third; that is, the one immediately within or beneath it. To apply these ideas to the refinery processes, the decarburation of the cast iron is merely a restoration of the carbon to the surface, in tracing inversely the same progressive steps as had carried it into the interior during the smelting of the ore. Thus the oxygen of the air, fixing itself at first at the surface of the cast metal on the carbon which it finds there, burns it. Fresh charcoal, issuing from the interior, comes then to occupy the place of what had been dissipated, till, finally, the whole carbon is transferred from the centre to the surface, and is then converted into either carbonic acid gas, or oxide of carbon—an alternative which may fairly be allowed, since no direct experiment has hitherto proved what is the precise product of this combustion. Malleable iron is frequently obtained directly from the ores by one fusion, when the metallic oxide is not too much contaminated with foreign substances. This mode of working, which is allowed to be vastly more economical than the one just described, both on account of the saving of time

and combustibles, has, for a long period, been employed in Catalonia, in the Pyrenees, from which circumstance it is called the *method of the Catalan forge*. Those ores best adapted to its treatment, are the pure black oxide, red and brown oxide, and carbonate of iron, to extract the metal from which, it is sufficient to expose them to a high temperature in contact with charcoal, or carbonaceous gases. The furnace employed is similar to the refiner's forge above described. The crucible is a kind of semicircular or oblong basin, 18 inches in diameter, and 8 or 10 in depth, excavated in an area, or small elevation of masonry, 8 or 10 feet long, by 5 or 6 broad, and covered in with a chimney. The tuyere stands five or six inches above the basin, and has a little inclination downwards, and the blast is given by a water-blowing machine. The first step consists in expelling the water combined with the oxide, as well as the sulphur and arsenic, when these contaminations are present. This is done, as usual, by roasting in the open air. The roasted ore is crushed to a tolerably fine powder, and thrown by the shovel-full, at intervals, upon the charcoal fire of the forge hearth, the sides and bottom of the basin being previously lined with two or three *brasques* (coats of pounded charcoal). It gradually softens and unites into lumps more or less coherent, which finally melt and accumulate in the bottom of the crucible or basin. A thin slag is occasionally let off from the upper surface of the melted iron in the basin, by means of holes which are opened and closed according to the discretion of the workmen. The melted iron preserves a pasty condition, owing to the heat communicated from above; and when a mass of sufficient dimensions has accumulated, it is removed, put under the hammer, and forged at once. A lump or bloom of malleable iron is thus produced in the space of three or four hours. The iron is generally soft, very malleable, and little steely. Four workmen are employed at one forge; and, by being relieved every six hours, they are enabled to make 86 cwt. of iron per week. In the Catalonian forges, 100 pounds of iron are obtained from 300 pounds of ore (a mixture of sparry iron, or carbonate, and hematite) and 310 pounds of charcoal, being a produce of 33 per cent. The foregoing method of obtaining bar iron is in general use in all the southern countries of Europe, and is beginning to be practised extensively in the U. States, for the ores

of which, especially the magnetic iron, and hematite and spathic iron ore, it is remarkably well suited. As yet, however, our spathic iron ore has been wholly neglected. (For an account of the production of that modification of iron called *steel*, see the article under that head.)—Respecting the statistics of iron, we have but few general details which are worthy of confidence. In 1827, the furnaces of England and Scotland produced 690,000 tons. These furnaces amounted to 284, of which 95 were in Staffordshire, and 90 in South Wales. In 1828, the total production of France in this metal was estimated at 176,000 tons; and in the same year, the exports of Sweden amounted to 35,212 tons, of which 9409 tons were imported into the U. States. Russia, including Siberia and Norway, may be supposed to yield a quantity equal to France; while the annual product of all the other countries of Europe together, probably but little exceeds that of Britain. The whole amount yielded by the U. States cannot be estimated beyond 50,000 tons.

Pure Iron. Its specific gravity is 7.7, but it may be made 7.8 by hammering. The specific gravity of cast iron is 7.281; that of steel, 7.795. Under the article *Cohesion*, the tenacity of iron, compared with that of some of the other metals, is given. In malleability, it is much inferior to gold, silver and copper; but in ductility, it approaches these metals, iron wires of $\frac{1}{150}$ of an inch being frequently drawn. It melts in the extreme heat of chemical furnaces, which equals 158° Wedgewood. We have noticed, under the head of *Native Iron*, the crystalline texture of this metal, as found in nature. A mass of bar iron, which has undergone all the operations of puddling and rolling, after being left in liquid muriatic acid till saturation, presents the appearance of a bundle of fascies, whose fibres run parallel through its whole length. At the two ends of the mass, the points appear perfectly detached from each other, and the fibres are so distinct as to seem to the eye to be but loosely compacted. Iron by friction acquires a peculiar smell, and it possesses the color distinctively called *iron-gray*. Bars of it, kept in a vertical position, or at an angle of 70° to the horizon, become magnetic spontaneously. They may also be magnetized by percussion, or an electric shock, either from a common machine or a thunder cloud. The magnetic effect is rendered most powerful, in a bar of iron, by allowing galvanic electricity to circu-

late in circles round it, after being bent into the shape of a horse shoe. A bar, weighing 21 pounds, has, in this manner, been made to support a weight of 750 pounds; and the galvanic battery employed consisted merely of two concentric copper cylinders, with a third, of zinc, between them, which were immersed in half a pint of dilute acid. The magnetism of soft iron, however, is not permanent, like that of steel. Iron burns with the greatest facility, as may be seen in the shops of the smiths, where, on withdrawing a bar of iron from the fire, at a white heat, it emits brilliant sparks in every direction. It is also visible by projecting iron filings upon a lighted candle or a common fire. Its combustion in these cases is the result of its combination with the oxygen of the atmosphere. When it is heated and introduced into a vessel of pure oxygen gas, its combustion is vastly more rapid, and the scintillation which it occasions is extremely brilliant. There are only two non-metallic combustibles, hydrogen and nitrogen, which have not hitherto been combined with iron. Carbon, boron, phosphorus, sulphur and selenium, form with it compounds more or less intimate. The same thing holds of most of the metals. When cold, it is without action on pure water, but decomposes it rapidly when heated to the degree of incandescence. The rusting of iron in a damp atmosphere has been ascribed to the joint agency of carbonic acid and water.

Compounds of Iron. Iron unites with oxygen to form three, and, possibly, four *oxides*. The first oxide is obtained either by digesting an excess of iron filings in water, by the combustion of iron wire in oxygen, or by adding pure ammonia to a solution of green copperas, and drying the precipitate out of contact of air. It is of a black color, becoming white by its union with water in the hydrate, attractable by the magnet, but more feebly than iron. Its composition is,

Iron, . . . 100.0 77.82 3.5

Oxygen, . 28.5 22.18 1.0

The second or deutoxide of iron is formed by exposing a coil of fine iron wire, in an ignited porcelain tube, to a current of steam, as long as any hydrogen comes over. Its composition is,

Iron, 100. 72.72

Oxygen, 37.5 27.28

The fourth oxide is obtained by igniting the nitrate, or carbonate of iron, by calcining iron in open vessels, or simply by treating the metal with strong nitric acid,

then washing and drying the residuum. Colcothar of vitriol, or thoroughly calcined copperas may be considered as peroxide of iron. This oxide exists abundantly in nature, as may be seen by referring to the preceding account of the *Ores of Iron*. It is a compound of iron, 100, and oxygen, 43. The third oxide has not been satisfactorily established. If the experiments upon its nature are correct, its relation to the others may be perceived in the following statement of M. Berthier, in which the quantities of oxygen combined with the same quantity of metal, in the four oxides, are to each other as the numbers 6, 7, 8, 9. There are two *chlorides* of iron; the first consisting of iron 46.57, and chlorine 53.43; the second of iron 35.1, and chloride 64.9. The proto-chloride is a fixed, the deutochloride, a volatile substance. *Iodine* forms with iron a compound of a light green color, soluble in water. There are two *sulphurets* of iron. The proto-sulphuret is formed by heating equal weights of iron filings and sulphur in a crucible or iron vessel, to incandescence. It is of a dark gray color, brittle, feebly magnetic. Its composition is iron 28, sulphur 16. It abounds in nature. (See *Magnetic Iron Pyrites*, among the *Ores of Iron*.) The artificial sulphuret varies in composition from the excess of one or the other of its ingredients. It is employed in eudiometry, and is used for the production of sulphureted hydrogen gas, which it evolves copiously on the addition of diluted muriatic or sulphuric acid. The persulphuret of iron is the common iron pyrites found so abundantly in nature. It is composed of iron 28, and sulphur 32. There is also a phosphuret of iron, formed by calcining four parts of phosphate of iron, and one of lampblack, in a covered crucible. It does not act on the magnetic needle; remains unchanged in the air; is not affected by nitric acid, except it be strong and hot; and is decomposable by charcoal.

Carburets of Iron. Carbon unites with iron to form steel, cast iron, and graphite, or plumbago. The proportions of carbon corresponding to different carburets of iron, according to Mr. Musket, are as follow:

$\frac{1}{120}$	soft cast steel.
$\frac{1}{100}$	common cast steel.
$\frac{3}{50}$	the same, but harder.
$\frac{1}{50}$	the same, too hard for drawing.
$\frac{2}{5}$	white cast iron.
$\frac{1}{20}$	mottled cast iron.
$\frac{1}{3}$	black cast iron.

Graphite contains about 10 per cent. of iron. It was remarked above, that the magnetism of pure iron is transient. When it is combined with oxygen, carbon, or sulphur, however, it acquires the magnet's coercive virtue, which attains a maximum of force with certain proportions of the constituents; hitherto undetermined. Of the alloys which iron unites with other metals to form, tin plate is the most useful. The surface of the iron plates is cleaned, first by steeping in a crude bran-vinegar, and then in dilute sulphuric acid, after which they are scoured bright with hemp and sand, and deposited in pure water to prevent oxidation. Into a pot, containing equal parts of grain and block-tin, in a state of fusion, covered with tallow, the iron plates are immersed in a vertical position, having been previously kept for about an hour in melted tallow. From 300 to 400 plates are tinned at a time. Each parcel requires an hour and a half for the mutual incorporation of the metals. After lifting out the tinned plates, the striæ are removed from their surfaces and under edges by subsequent immersion in melted tin, and then in melted tallow, wiping the surfaces at the same time with a hempen brush. Alloys of steel with platinum, rhodium, gold and nickel, may be obtained when the heat is sufficiently high. The alloy with platinum fuses when in contact with steel, at a heat at which the steel itself is not affected. But the most curious circumstances attend the alloy of silver. If steel and silver be kept in fusion together for a length of time, an alloy is obtained which appears to be very perfect, while the metals are in the fluid state, but, on solidifying and cooling, globules of pure silver are expressed from the mass, and appear on the surface of the button. If an alloy of this kind be forged into a bar, and then dissected by the action of dilute sulphuric acid, the silver appears, not in combination with the steel, but in threads throughout the mass, so that the whole has the appearance of a bundle of fibres of silver and steel, as if they had been united by welding. The appearance of these silver fibres is very beautiful. They are sometimes one eighth of an inch in length, and suggested the idea of giving mechanical toughness to steel, where a very perfect edge may not be required. When 1 of silver and 500 steel are properly fused together, a very perfect alloy is produced, which, when forged, and dissected by an acid, exhibits no fibres, even when view-

ed with a high magnifying power, though, by dissolving any portion of the mass in acid, and applying a delicate test, the silver is recognised as being every where present. This alloy proves decidedly superior to the very best steel, and its excellence is unquestionably due to the presence of the silver. Various cutting instruments, as razors, penknives, surgical instruments, &c., are now manufactured from it. It is known under the name of *silvered steel*. Equal parts, by weight, of platinum and steel, form a beautiful alloy, which takes a fine polish, and does not tarnish. The color is the finest imaginable for a mirror. The specific gravity of the compound is 9.862. The proportions of platinum that appear to improve steel for edge instruments are from one to three per cent. The alloys of steel with rhodium would prove highly valuable, were it not for the scarcity of the latter metal.

Salts of Iron. These are possessed of the following general properties: Most of them are soluble in water; those with the protoxide for the base are generally crystallizable; those with peroxide, for the most part, are not so: the former are insoluble, the latter soluble in alcohol. From solutions of these salts ferroproussiatic of potash throws down a blue precipitate, or one becoming blue in the air; infusion of galls gives a dark blue precipitate, or one becoming so in the air; hydrosulphuret of potash or ammonia gives a black precipitate; but sulphureted hydrogen merely deprives the solutions of iron of their yellow-brown color; succinate of ammonia gives a flesh-colored precipitate with salts of the peroxide. We shall notice these salts individually, in an alphabetical order. *Protoacetate* of iron forms small prismatic crystals, of a green color and a sweetish taste. *Peracetate* of iron forms a reddish brown uncrystallizable solution, much used by the calico printers, and is prepared by keeping iron turnings, or pieces of old iron, for six months, immersed in redistilled pyroligneous acid. *Protarseniate* of iron exists native in crystals (see *Iron Ores*), and may be formed in a pulverulent state, by pouring arseniate of ammonia into sulphate of iron. It is insoluble. *Perarseniate* of iron may be formed by pouring arseniate of ammonia into peracetate of iron, or by boiling nitric acid on the protarseniate. It is insoluble. *Antimoniate* of iron is white, becoming yellow, insoluble; *borate*, pale, yellow, and insoluble; *benzoate*, yellow and insoluble; *protocarbonate*, greenish and soluble; *percarbo-*

nate, brown and insoluble; *chromate*, blackish and insoluble; *protocitrate*, brown, crystals soluble; *protoferroproussiatic*, white, insoluble. The *perferroproussiatic* is the beautiful pigment called *Prussian blue*. When exposed to a heat of 400° Fahr., it takes fire in the open air; but in close vessels, it is decomposed, apparently, into carbureted hydrogen, water, and hydrocyanate of ammonia, which come over, while a mixture of charcoal and oxide of iron remains in the state of a pulverulent pyrophorus, ready to become inflamed on contact with the air. Prussian blue is of an extremely deep blue color, insipid, inodorous, and considerably denser than water. Neither water nor alcohol have any action on it. It is usually made by mixing together one part of the ferrocyanate of potash, one part of copperas, and four parts of alum, each previously dissolved in water. Prussian blue, mingled with more or less alumina, precipitates. It is afterwards dried on chalk stones in a stove. When sulphuric acid is added to Prussian blue, it makes it perfectly white, apparently by abstracting its water; for the blue color returns on dilution of the acid; and if the strong acid be poured off, it yields no traces of either prussic acid or iron. *Protogallate* of iron is colorless and soluble; *pergallate*, purple and insoluble; *protomuriate*, green and crystallizable, very soluble; *permuriate*, brown, uncrystallizable, very soluble (see *Chlorides of Iron*, previously described); *protonitrate*, pale green, soluble; *pernitrate*, brown, soluble; *protoxalate*, in green prisms, soluble; *peroxalate*, yellow, scarcely soluble; *protophosphate*, blue, insoluble; *perphosphate*, white, insoluble; *protosuccinate*, in brown crystals, soluble; *persuccinate*, brownish red, insoluble. *Protosulphate*, or *green vitriol*, or *copperas*, is obtained by putting iron into an aqueous sulphurous acid, and letting them remain together for some time out of contact with the air. It is generally obtained, however, for the purposes of the arts, not perfectly free from the peroxide, by the following processes: Native iron pyrites is exposed to air and moisture, when the sulphur and iron both absorb oxygen, and form the salt; or metallic iron is added to sulphuric acid, when diluted, when the union takes place at once. Both methods are practised: the latter is more economical in point of time, and affords a purer salt, but the former is the one most generally adopted. The production of copperas from pyrites is conducted in the following manner: The ore

is broken down into pieces of a few inches in diameter, and thrown into large beds, or heaps, of several feet in thickness, disposed on an inclined soil. Water is now let on to the heaps, in moderate quantities, or they are left to derive moisture from rain. The vitriolization immediately commences, and is often attended with a considerable degree of heat. Sometimes the whole mass kindles, which is a disadvantage, as it burns off the sulphur in sulphureous acid vapor, instead of converting it gradually into sulphuric acid to form the sulphate desired. The process goes on well when the pyrites is seen cracking open and becoming covered with a whitish efflorescence. This efflorescence is continually dissolving, from time to time, by the effect of the rains, and the solution trickles down through the heaps, and flows off by gutters to a common reservoir, which is a leaden vessel, generally about 7 feet deep, 12 to 14 long, and 6 or 7 wide, where it is evaporated for several days. As an excess of sulphuric acid often exists in the liquor, a quantity of iron plates or turnings is frequently added for its saturation. From this reservoir it is run into a crystallizing vat, and there remains for several weeks, at the end of which time the mother liquor is pumped back into the boiler, and the crystals, after draining, are removed from the frames of wood-work on which they have formed, and packed in hogsheads for sale. Instead of going directly from the boiler to the crystallizing pools, the liquor is sometimes allowed to stand 24 hours, in a vessel intermediate between these, for the deposition of a sediment of ochre which it contains. Copperas forms beautiful green crystals, whose forms and other natural historical characters, as well as composition, have been given under the *Iron Ores* in the commencement of this article. It is used in dyeing and making ink, in the formation of Prussian blue, &c. The *persulphate* of iron is formed by the simple exposure of copperas to the air, especially if in the state of solution, or by boiling the green sulphate with nitric acid. Its color is yellowish red; uncrystallizable; taste sharp and styptic. The *tartrate* and *pertartrate* of iron may also be formed; and, by digesting cream of tartar with water on iron filings, a triple salt is obtained, formerly called *tartarized tincture of Mars*.

Iron is one of the most valuable articles of the *materia medica*. The protoxide acts as a genial stimulant and tonic in all cases of chronic debility not connected

with organic congestion or inflammation. It is peculiarly efficacious in chlorosis. The peroxide and its combinations are almost uniformly irritating, causing heartburn, febrile heat and quickness of pulse. Many chalybeate waters contain an exceedingly minute quantity of protocarbonate of iron, and yet exercise an astonishingly recruiting power over the exhausted frame. Their qualities may be imitated by dissolving 3 grains of sulphate of iron, and 61 of bicarbonate of potash, in a quart of cool water, with agitation, in a close vessel.

IRON CROWN. A golden crown, set with precious stones, preserved at Monza, in Milan, with which anciently the kings of Italy, and afterwards the Roman emperors, were crowned, when they assumed the character of kings of Lombardy, has received the above name, from an iron circle, forged from a nail of the cross of Christ, and introduced into the interior of it. Napoleon, after his coronation (1805), established the order of the iron crown. When the emperor of Austria (1815) took possession of the estates in Italy, which fell to him under the name of the *Lombardo-Venetian kingdom*, he admitted the order of the iron crown among the orders of the house of Austria.

IRON MASK. (See *Mask*.)

IRON-WOOD. This name is given, in some parts of the U. States, to the *ostrea virginica*—a small tree, having the foliage of a birch, and the fruit somewhat resembling that of the hop. It is found scattered over the whole of the U. States, even as far westward as the base of the Rocky mountains, and is remarkable for the hardness and heaviness of the wood, which, however, has not hitherto been applied to any very important uses, partly on account of its small size. The trunk usually does not exceed six inches in diameter; but the excellent qualities of the wood may, at some future day, be better appreciated. The term *hop-hornbeam*, derived from the form of the fruit, is frequently applied to the species of *ostrea*.

IRONY; a term invented by the refined Athenians (*εἰρωνεία*, dissimulation). By *irony*, we understand, in common life, that more refined species of ridicule, which, under the mask of honest simplicity, or of ignorance, exposes the faults and errors of assuming folly, by seeming to adopt or defend them. It neither presupposes a bad heart nor a malicious purpose, and is consistent with so much kindness and true urbanity, that even the object of ridicule may be forced to join in

the laugh, or be disposed to profit by the lesson. One mode of irony is, when a person pretends to hold the false opinion or maxim as true, while, by stronger and stronger illustration, he so contrasts it with the true, that it must inevitably appear absurd. Another mode is, when he assumes the mask of innocent *naïveté*, and excites ridicule by the unreservedness of his professions. But humor, concealed under seriousness of appearance, is the foundation of both. On the use and treatment of irony, in comic and satirical poetry, Jean Paul has given the best directions, in his *Vorschule der Aesthetik*. (For the Socratic irony, see *Socrates*.) There is a certain sort of malicious irony (*persiflaeg*), the object of which is merely to ridicule, without the desire of correction.

IROQUOIS; the name given by the French to the confederacy of North American Indians, called, by the English, the *Five*, and, afterwards, the *Six Nations*. The Mohawks, Oneidas, Onondagas, Cayugas, Senecas and Tuscaroras were the members of this confederacy. They formerly resided on the Mohawk river and the lakes which still bear their names, and extended their conquests to the Mississippi, and beyond the St. Lawrence. Their valor and successes have procured them the name of the *Romans of America*. Their territory abounded with lakes well stored with fish; their forests were filled with game, and they had the advantage of a fertile soil. The sachems owed their authority to public opinion: the general affairs of the confederacy were managed by a great council, composed of the chiefs, which assembled annually at Onondaga. They exterminated the Eries, drove out the Hurons and Ottawas, subdued the Illinois, Miamies, Algonquins, Lenni Lenapes, Shawanese, and the terror of their arms extended over a great part of Canada and the northern and north-eastern parts of the U. States. In the long wars between the English and French, which continued with some interruptions, for nearly a century, until 1763, they were generally in the English interest; and, in the revolutionary war, they were also mostly in favor of the British. Their numbers have much diminished. Some of the tribes are extinct; some have made considerable advances in civilization, while others have fallen into a state of squalid misery. Some of the nations remained in New York; others removed to Canada. The number in New York, in 1818, was 4575, including the Moheakunnuk or New Stockbridge,

the Mohicans and Narragansetts, who had been adopted into the confederacy. They owned 265,315 acres of land. (See Colden's *History of the Five Nations*; Morse's *Report on Indian Affairs*, New Haven, 1822; *Indians*, and *Indian Languages*.)

IRRATIONAL QUANTITIES are those which cannot be measured by unity or parts of unity; for example, the square root of 2, 1,4124 . . . which, by continued approximation, can be obtained more and more exactly, without end, in parts of unity, but can never be exactly determined. The relation of two quantities is also called *irrational*, when one cannot be exactly measured by the whole and parts of the other. The circumference and diameter of a circle stand in such an *irrational* relation to each other, because we can only find by approximation, how many times the latter is contained in the former.

IRRAWADDY, OR IRAWADDY; a large river of Asia, in the Chinese and Birman empires. Crawford (*Embassy to Ava*, London, 1829) thinks it has its source in the provinces of Lao and Yunan. According to Wilcox, it is 80 yards broad in lat. 27° 30', where he visited it, and he was informed by the natives that he was 50 miles from its source. It falls, by 14 mouths, into the bay of Bengal, after having divided into two principal branches, in Pegu, lat. 17° 45'. The most easterly branch passes by Rangoon; the most westerly, by Bassien or Persaim. According to Crawford, it is navigable for boats to Bhamo, about 300 miles above Ava. The intermediate space between the eastern and western branches forms a Delta, covered with trees and long grass, and inhabited chiefly by buffaloes, deer and tigers. In lat. 21° 45', it receives the Keen-Dwem, a considerable river, from the north-west.

IRRITABILITY (*irritabilitas*; from *irrito*, to provoke;—*vis insita* of Haller; *vis vitalis* of Gorter; *oscillation* of Boerhaave; *tonic power* of Stahl; *muscular power* of Bell; *inherent power* of Cullen); the contractility of muscular fibres, or a property peculiar to muscles, by which they contract, upon the application of certain *stimuli*, without a consciousness of action. This power may be seen in the tremulous contraction of muscles when lacerated, or when entirely separated from the body in operations. Even when the body is dead, to all appearance, and the nervous power is gone, this contractile power remains till the organization yields, and begins to be dissolved. It is by this inherent power

that a cut muscle contracts, and leaves a gap, that a cut artery shrinks, and grows stiff after death. This irritability of muscles is so far independent of nerves, and so little connected with feeling, which is the province of the nerves, that, upon stimulating any muscle by touching it with caustic, or irritating it with a sharp point, or driving the electric spark through it, or exciting with the metallic conductors, as those of silver or zinc, the muscle instantly contracts, although the nerve of that muscle be tied; although the nerve be cut so as to separate the muscle entirely from all connexion with the system; although the muscle be separated from the body; although the creature, upon which the experiment is performed, may have lost all sense of feeling and have been long apparently dead. Thus a muscle, cut from the limb, trembles and palpitates a long time after; the heart, separated from the body, contracts when irritated; the bowels, when torn from the body, continue their peristaltic motion, so as to roll upon the table, ceasing to answer to *stimuli* only when they become stiff and cold. Even in vegetables, as in the sensitive plant, this contractile power lives. Thence comes the distinction between the *irritability* of muscles and the *sensibility* of nerves; for the irritability of muscles survives the animals, as when it is active after death; survives the life of the part, or the feelings of the whole system, as in universal palsy, where the vital motions continue entire and perfect, and where the muscles, though not obedient to the will, are subject to irregular and violent actions; and it survives the connexion with the rest of the system, as when animals very tenacious of life, are cut into parts; but *sensibility*, the property of the nerves, gives the various modifications of sense, as vision, hearing, and the rest; gives also the general sense of pleasure or pain, and makes the system, according to its various conditions, feel vigorous and healthy, or weary and low. The eye feels and the skin feels; but their appointed *stimuli* produce no motions in these parts: they are sensible, but not irritable. The heart, the intestines, the urinary bladder, and all the muscles of voluntary motion, answer to *stimuli* with a quick and forcible contraction; and yet they hardly feel the *stimuli* by which these contractions are produced, or, at least, they do not convey that feeling to the brain. There is no consciousness of present stimulus in those parts which are called into action by the impulse of the nerves, and at the command of the will; so

that muscular parts have all the irritability of the system, with but little feeling, and that little owing to the nerves which enter into their substance; while nerves have all the sensibility of the system, but no motion. After every action in an irritable part, a state of rest, or cessation from motion, must take place before the irritable part can be again incited to action. If, by an act of volition, we throw any of our muscles into action, that action can only be continued for a certain space of time. The muscle becomes relaxed, notwithstanding all our endeavors to the contrary, and remains a certain time in that relaxed state, before it can be again thrown into action. Each irritable part has *stimuli* which are peculiar to it, and which are intended to support its natural action: thus blood is the stimulus proper to the heart and arteries; but if, by any accident, it gets into the stomach, it produces sickness or vomiting. The urine does not irritate the tender fabric of the kidneys, ureters or bladder, except in such a degree as to preserve their healthy action; but if it be effused into the cellular membrane, it brings on such a violent action of the vessels of these parts, as to produce gangrene. Such *stimuli* are called *habitual stimuli* of parts. Each irritable part differs from the rest in regard to the quantity of irritability which it possesses. This law explains to us the reason of the great diversity which we observe in the action of various irritable parts: thus the muscles of voluntary motion can remain a long time in a state of action, and, if it be continued as long as possible, another considerable portion of time is required before they regain the irritability they lost; but the heart and arteries have a more short and sudden action, and their state of rest is equally so. The circular muscles of the intestines have also a quick action and short rest. The action of every stimulus is in an inverse ratio to the frequency of its application. A small quantity of spirits, taken into the stomach, increases the action of its muscular coat, and also of its various vessels, so that digestion is thereby facilitated. If the same quantity, however, be taken frequently, it loses its effect. In order to produce the same effect as at first, a larger quantity is necessary; and hence the origin of dram-drinking. The more the irritability of a part is accumulated, the more that part is disposed to be acted upon. It is on this account that the activity of all animals, while in perfect health, is much livelier in the morning than at any other part of the

day; for during the night, the irritability of the whole frame, and especially that of the muscles destined for labor, viz. the muscles for voluntary action, is reaccumulated. The same law explains why digestion goes on more rapidly the first hour after food is swallowed than at any other time; and it also accounts for the great danger that accrues to a famished person upon first taking in food.—In German philosophy, *irritability*, *sensibility* and *reproductivity* constitute the whole of organic life. Since the time of Schelling, *irritability* is much considered in the mental philosophy of that country. The French, treating the subject merely with reference to physiology, generally use, at present, the word *contractility* instead of *irritability*.

IRUS; a mendicant of Ithaca, employed by the suitors of Penelope in subordinate offices. On Ulysses' return, when he approached his mansion in the habit of a beggar, in order to surprise those uninvited guests, Irus attempted to prevent his entering, and challenged Ulysses to a contest, in which Irus was beaten.

IRVINE, William, an officer in the revolutionary war, was born in Ireland, and educated for the profession of medicine. During the war between France and England, which commenced in 1754, and ended in 1763, he served for a time as a surgeon on board of a British ship of war, and, soon after the conclusion of peace, removed to America, and continued the practice of his profession in Carlisle, Pennsylvania. He was a member of the convention which met at Philadelphia, July 15, 1774, and recommended the meeting of a general congress. In January, 1776, he was authorized to raise and command a regiment of the Pennsylvania line, which, in a few months afterwards, was fully equipped. In the following June, he was taken prisoner in the unsuccessful attempt made by general Thompson, to surprise the vanguard of the British army, then stationed at the village of Trois Rivières, in Canada, and was carried to Quebec, where he remained in durance until April, 1778, when he was exchanged. Immediately after his release, he was promoted to the command of the second Pennsylvania brigade, and, in 1781, he was intrusted with the defence of the north-western frontier, which was threatened by the British and Indians. The charge was one that required not only courage and firmness, but great prudence and judgment, and was executed by general Irvine in a manner which fully justified the choice of him

made by general Washington. After the war, he was elected a member of congress under the confederation, and he was also a member of the convention which framed the constitution of Pennsylvania. When the whiskey insurrection broke out in that state, in 1794, two sets of commissioners, the one representing the U. States, and the other the commonwealth, were first despatched to the insurgents, in order to induce them to return to their duty, and amongst the latter was general Irvine. This measure, however, proving ineffectual, force was resorted to, and general Irvine was placed at the head of the Pennsylvania militia, and contributed greatly to the successful result of the affair. About this time, he removed, with his family, from Carlisle to Philadelphia, where he became intendant of military stores, and president of the Pennsylvania society of Cincinnati. He continued to reside in that city, universally respected for his public and private virtues, until the summer of 1804, when a period was put to his life by an inflammatory disorder, in the 63d year of his age.

IS; the Turkish corruption of the Greek *is*, prefixed to many geographical names; as *Ismyr*, from *is* Σμύρναν (*Smyrna*), *Isnik* (Nice), *Ismid* (Nicomedia).

ISAAC; the son of Abraham, remarkable for his birth, which was long promised to his parents, and took place when they were far advanced in age, and for his having early been destined to perish as a victim on the altar. (See *Abraham*.) He escaped death by a miracle, and resembled his father in faith and steadfastness in the worship of the true God in the midst of heathens, but not in activity and magnanimity. In him the patriarchal character shone milder and softer than in Abraham, but purer and nobler than in his son Jacob. Accustomed to a tranquil life, by the practice of agriculture, which he carried farther than Abraham, and leading a more settled life than his predecessors, yielding and patient in difficulties, he appeared in his family a tender father, but prematurely aged, weak, and easy to be imposed upon, who preferred the quiet, crafty Jacob to the ruder but more honest Esau.

ISABELLA of Castile, the celebrated queen of Spain, daughter of John II, was born in 1451, and married, in 1469, Ferdinand V, king of Arragon. After the death of her brother, Henry IV, in 1474, she ascended the throne of Castile, to the exclusion of her elder sister, Joanna, who had the rightful claim to the crown. Dur-

ing the lifetime of her brother, Isabella had gained the favor of the estates of the kingdom to such a degree that the majority, on his death, declared for her. From the others, the victorious arms of her husband extorted acquiescence, in the battle of Toro, in 1476. After the kingdoms of Arragon and Castile were thus united, Ferdinand and Isabella assumed the royal title of Spain. With the graces and charms of her sex, Isabella united the courage of a hero, and the sagacity of a statesman and legislator. She was always present at the transaction of state affairs, and her name was placed beside that of her husband in public ordinances. The conquest of Grenada, after which the Moors were entirely expelled from Spain, and the discovery of America, were, in a great degree, her work. In all her undertakings, the wise cardinal Ximenes was her assistant. She has been accused of severity, pride and unbounded ambition; but these faults sometimes promoted the welfare of the kingdom, as well as her virtues and talents. A spirit like hers was necessary to humble the haughtiness of the nobles without exciting their hostility, to conquer Grenada without letting loose the hordes of Africa on Europe, and to restrain the vices of her subjects, who had become corrupt by reason of the bad administration of the laws. By the introduction of a strict ceremonial, which subsists till the present day at the Spanish court, she succeeded in checking the haughtiness of the numerous nobles about the person of the king, and in depriving them of their pernicious influence over him. Private warfare, which had formerly prevailed to the destruction of public tranquillity, she checked, and introduced a vigorous administration of justice. In 1492, pope Alexander VI confirmed to the royal pair the title of *Catholic king*, already conferred on them by Innocent VIII. The zeal for the Roman Catholic religion, which procured them this title, gave rise to the inquisition (see *Inquisition*), which was introduced into Spain in 1480, at the suggestion of their confessor, Torquemada. Isabella died in 1504, having extorted from her husband (of whom she was very jealous) an oath that he would never marry again. (See *Ferdinand V*, *Ximenes*, and *Columbus*.)

ISABELLA; wife of Edward II of England. (See *Edward II*.)

ISABEY, Jean Baptiste; miniature painter; a pupil of David, distinguished for the delicacy and grace of his pencil. Isabey invented the very handsome style of chalk

and crayon drawings *à l'estampe*, in which he is unequalled. He frequently draws, with Indian ink, compositions of several figures, which are all portraits. His most famous pieces of this kind are, the Visit of Napoleon at Oberkamp, Napoleon on the Terrace at Malmaison, and many parades and presentations. He afterwards sketched all the princes and statesmen assembled at the congress of Vienna. One of his most beautiful pieces is his Skiff (*la nacelle*), where he is himself delineated with his family. The style *à l'estampe*, which strongly resembles stippling, was for some time the prevalent fashion, but Isabey's master hand was required to give it character. His miniature paintings are extraordinarily fine. He is the only artist in Paris who can compare with Augustin; and if the latter possesses more strength and warmth of color, Isabey has greater delicacy and softness.

ISÆUS, an Athenian orator, born at Chalcis in Eubœa, lived in the first half of the fourth century before Christ, till after 357. Lysias and Isocrates were his teachers. Wholly unconnected with public affairs, he devoted himself to instruction in eloquence, and wrote speeches for others. Of his 50 orations, 11 are extant, which are recommended by their simple and often forcible style, and are generally on causes respecting inheritance. They are to be found in the 7th vol. of Reiske's *Oratores Græci*. Sir W. Jones translated 10 orations of Isæus, with a commentary (London, 1779). The 11th, now known, has been discovered since.

ISAAH, the first of the four great prophets, prophesied during the reigns of the kings of Judah, from Uzziah to Hezekiah, at least 47 years. Of the circumstances of his life nothing is known, but that he had an important influence over the kings and people. Of the sacred compositions which pass under his name in the Old Testament, that part which is unquestionably his gives him a high rank among the greatest poets. His style is peculiarly appropriate to the subjects of which he treats; it unites simplicity and clearness with the highest dignity and majesty; and in fulness and power, his poetry far surpasses that of all the other prophets. His writings are chiefly denunciations and complaints of the sins of the people, menaces of approaching ruin, and animating anticipations of a more glorious future. The whole bears the stamp of genius and true inspiration, and is marked throughout by nobleness of thought and feeling. (See *Lowth's New Translation*

of *Isaiah*, and his *Lectures on the Sacred Poetry of the Hebrews*; also, the article *Prophets*.)

ISAURIA, in ancient geography; a country in Asia Minor, forming a part of Pisidia, lying on the west of Cilicia, and on the south of Lycæonia. The inhabitants were shepherds and herdsmen, and formidable as robbers. Their capital, Isaura, was a mere haunt of bandits. The consul Publius Servilius destroyed it; but another Isaura was built not far from it. Hence Strabo mentions two.

ISCHIA (anciently *Pithecusa*, *Enaria*, *Arime*, and *Inarime*); an island in the Mediterranean, six miles from the coast of Naples, about ten miles in circuit. Lon. 13° 56' E.; lat. 40° 50' N.; population, 24,000; square miles, 25. It contains several high hills, one of which is 2300 feet above the sea. It is fertile in fruits, and abounds in game. The white wine is much esteemed. The air is healthy, on which account it is much resorted to by invalids, as it is but a small distance from the continent, and hardly more than four leagues from Naples. It is volcanic; and an earthquake in 1828 destroyed several villages on the island. The porcelain clay of Ischia was prized by the ancients, but the true *terra d'Ischia* is rare. Ischia, the capital town, is situated on the N. coast of the island, and is an episcopal see with 3101 inhabitants.

ISENBURG, or UPPER ISENBURG; a principality in Germany, situated in the Wetterau, about 30 miles long and 10 wide, on the borders of the county of Hanau; subject partly to Hesse-Cassel, and partly to Hesse-Darmstadt. Population, 47,457; square miles, 318.—*Isenburg*, a principality belonging to Hesse-Cassel, erected since 1816, contains 16,200 inhabitants, and 137 square miles.

ISENBURG, NEW; a town of Hesse-Darmstadt, in Isenburg, founded in 1700 by French refugees; three miles S. of Frankfort on the Maine; four S. W. of Offenbach; lon. 8° 38' E.; lat. 50° 3' N.; population, 1170.

ISÈRE (anciently *Isara*); a river which rises in the Alps, about 12 miles from mount Cenis, in a mountain called *Iseran*, in the duchy of Savoy. After entering France, it passes by Grenoble, St. Quentin, Romans, &c., and joins the Rhone about three miles above Valence.

ISÈRE; a department of France, constituted of the former Dauphiny. It takes its name from the river Isère, which crosses it. It is divided into four arrondissements. Grenoble is the capital. Square

miles, 3440; population, 525,984. (See *Department*.)

ISERLOHN; a town in the Prussian county of Mark, province of Westphalia, on the small river Baaren, with 5500 inhabitants, in 730 houses. The inhabitants are mostly Lutherans, but there are also some Catholics and Calvinists. There is a gymnasium here. It has manufactures of iron, brass, wire, and small wares, as needles, brass scales, &c. More than 60 considerable commercial houses keep up an intercourse with Italy, France and Germany. There are also woollen and silk manufactures and bleacheries in the environs. Iserlohn is about 15 leagues S. of Münster.

ISHMAELITES, in ancient geography and history; the descendants of Ishmael, the son of Abraham by Hagar. (q. v.) Ishmael was born 1910 B. C. After the dismissal of Hagar from the house of Abraham, she wandered with her son to the wilderness of Paran, which bordered on Arabia, and here Ishmael became an expert hunter and warrior. His mother procured him a wife from Egypt, by whom he had 12 sons, who became the heads of so many Arabian tribes.—The name of *Ishmaelites*, or *Ismaelians*, is also given to a Mohammedan sect which originally belonged to the Shiites, the adherents of Ali and the opponents of the Sunnites. In the first century of the Hegira, the Imam Giaffir-el-Sadek, a descendant of Ali, on the death of his eldest son, Ishmael, having transferred the succession to his younger son, Mousa, to the prejudice of the children of Ishmael, a party refused to acknowledge Mousa, and considered Ishmael's posterity as the legitimate Imans. By the Oriental historians, they are reckoned with the Nassarians, among the Batenins, or Batenites, that is, adherents of the mystical, allegorical doctrines of Islamism. From the 8th to the 12th century, they were powerful in the East. Under the name of *Carmatians* (as they were called, from Carmati, near Cufa, the birthplace of their chief Karfeh, in the 8th century), they devastated Irak and Syria. In Persia, which they likewise overran about this time, they were called *Meladehs*, that is, *impious*, or *Talimites*, because they professed Talim's doctrine, that man can learn truth only by instruction. One dynasty of the Ismaelians, founded by Mohammed Abu-Obkid-Allah, conquered Egypt about 910, and was overthrown by Saladin, the caliph of Bagdad, about 1177, when the dynasty became extinct with Adhed-Udin-Allah. The other (still ex-

isting) Ishmaelite branch founded a kingdom in Syria in 1090, under the Iman Hassan Ben-Sabbah, which became formidable in the East, by its military power. Hassan, with his seven successors, is known in the East under the name of the *Old Man of the Mountain*, because his residence was in the mountain fastness of Mesiade in Syria. Thence he despatched his warriors—who were called *Haschischim*, from their immoderate use of the henbane (Arab. *haschischeh*), which produces an excitement amounting to fury—on expeditions of robbery and murder. These Ismaelians, therefore, acquired in the West the name of *Assassins* (corruption of *Haschischim*), which thence became, in the western languages of Europe, a common name for *murderer*. At the close of the 12th century, the Mongols put an end to the dominion of the Old Man of the Mountain, who, according to Von Hammer's researches, was not a prince, but merely the head of a sect. From this time, only a feeble residue of the Ismaelians, from whom proceeded the Druses, about A. D. 1020, has survived in Persia and Syria. At Khekh in Persia, an Ismaelian Iman still has his residence, who is revered as a god by the Ismaelians, who extend as far as India, and is presented with the fruits of their robbery, from which he pays a considerable tribute to the shah of Persia. The Syrian Ismaelians dwell around Mesiade, west of Hamah, and in the mountain Sennack on Lebanon; they are under Turkish dominion, with a sheik of their own, who, in consideration of a yearly tribute to the Porte of 16,500 piastres, enjoys the revenues of the country, rendered productive and flourishing by agriculture and commerce (in cotton, honey, silk and oil). These people are commended by modern travellers for their hospitality, frugality, gentleness and piety. But their prosperity was interrupted in a war with the Nassarians (q. v.), who took Mesiade in 1809, and desolated the country; and, though reinstated, in 1810, in the possession of their territory, they drag out a miserable existence. The Ismaelians, with other Shiites, adore the prophet Ali as the incarnate God, and Mohammed as an ambassador of God and the author of the Koran. All Ismaelians term themselves *Seid*, that is, descendants of the family of Mohammed, and wear the green turban, in token of their pretended nobility. In accordance with their exposition of the Koran, they believe in supernatural communications of the Deity by the prophets (Imans), and in the transmi-

gration of souls, deny a paradise and hell, do not observe the purifications and fasts of the orthodox Mohammedans, and perform their pilgrimages, not to Mecca, but to Meschid, the place of Ali's interment, four days' journey from Bagdad. They have no public temples, and their simple rites display more of pure theism than those of the Mohammedans. (See the treatise of Rousseau, consul-general in Aleppo, respecting the Ismaelians and Nassarians.)

ISIAC TABLE, or BEMBINE TABLE (*Mensa Isiaca* and *Tabula Bembina*); an ancient Egyptian monument, on which is represented the worship of the goddess Isis, with her ceremonies and mysteries. It is a square table of copper, divided into five compartments, covered with silver Mosaic skilfully inlaid. The principal figure of the central group is Isis. After the capture of Rome (1525), this table came into the possession of cardinal Bembo, from whom the duke of Mantua obtained it for his cabinet. After the sack of Mantua in 1630, cardinal Pava obtained it, and presented it to the duke of Savoy. It is at present in the royal gallery at Turin. Several engravings of it have been made; the first by Æneas Vicus (Venice, 1559) in figures, the size of the original. Caylus has engraved and described it in his *Recueil des Antiquités*, vii. p. 34. It is filled with all sorts of hieroglyphics; and this mixture, with other reasons, Spineto considers as a proof of its having been fabricated in Rome, at a late date, by some person who knew little about the science.

ISIDORE; the name of several martyrs, saints, monks and bishops; among others, of a monk of Pelusium in Egypt, died about the year 449, whose letters are valuable, as illustrative of the Bible. In the history of the papal law, a collection of decretals is worthy of note, which bears on its title page the name of Isidore, archbishop of Seville (who died 636), but which was corrupted in the 9th century by many spurious additions, and was widely circulated from the east of Germany.

ISINGLASS. This substance is almost wholly gelatine, 100 grains of good dry isinglass containing rather more than 98 of matter soluble in water. It is brought principally from Russia. The belluga yields the greatest quantity, being the largest and most plentiful fish in the rivers of Muscovy; but the sounds of all fresh water fish yield more or less fine isinglass, particularly the smaller sorts, found in prodigious quantities in the Caspian sea, and several hundred miles beyond Astra-

can, in the Wolga, Yaik, Don, and even as far as Siberia. It is the basis of the Russian glue, which is preferred to all other kinds for strength. Isinglass receives its different shapes in the following manner. The parts of which it is composed, particularly the sounds, are taken from the fish while sweet and fresh, slit open, washed from their slimy sordes, divested of a very thin membrane which envelopes the sound, and then exposed to stiffen a little in the air. In this state, they are formed into rolls about the thickness of a finger, and in length according to the intended size of the staple; a thin membrane is generally selected for the centre of the roll, round which the rest are folded alternately, and about half an inch of each extremity of the roll is turned inwards. Isinglass is best made in the summer, as frost gives it a disagreeable color, deprives it of its weight, and impairs its gelatinous principles. Isinglass boiled in milk forms a mild, nutritious jelly, and is thus sometimes employed medicinally. This, when flavored by the art of the cook, is the *blancmanger* of our tables. A solution of isinglass in water, with a very small proportion of some balsam, spread on black silk, is the court plaster of the shops. Isinglass is also used in fining liquors of the fermented kind, and in making mock-pearls, stiffening linens, silks, gauzes, &c. With brandy it forms a cement for broken porcelain and glass. It is also used to stick together the parts of musical instruments.

ISIS; the principal goddess of the Egyptians, the symbol of nature, the mother and nurse of all things. According to Diodorus, Osiris, Isis, Typhon, Apollo and Aphrodite (Venus) were the children of Jupiter and Juno. Osiris, the Dionysos (Bacchus) of the Greeks, married Isis (sun and moon), and they both made the improvement of society their especial care. Men were no longer butchered, after Isis had discovered the valuable qualities of wheat and barley, which had till then grown wild, unknown to mankind, and Osiris taught how to prepare them. In gratitude for these benefits, the inhabitants always presented the first ears gathered as an offering to Isis. Whatever the Greek related of his Demeter (Ceres) the Egyptian attributed to Isis. As agriculture was improved, civilization advanced, and a taste for art and letters was developed. At least, we first hear among the Egyptians, of the building of cities and temples, and the constitution of the priesthood, after the time of Isis, who was also rever-

ed as the inventress of sails. According to Plutarch's learned treatise (on Isis and Osiris), Osiris and Isis were the illegitimate offspring of Saturn and Rhea. When Helios (Sol), the husband of Rhea, discovered the intrigue, he pronounced judgment upon her, that she should not be delivered in any month nor in any year. Mercury, who was then in love with Rhea, and was loved by her, having heard the curse, discovered a way in which she might be delivered, notwithstanding. In playing at draughts with the moon, he won from her the seventieth part of her light, of which he made five days, and, having added them to the 360, of which the year had previously consisted, gave the goddess time for delivery. These were the intercalary days of the Egyptians, which were celebrated by them as the birthdays of their deities. Osiris was born the first, and at his birth a voice cried, "The lord of the world is born." On the second day, Rhea was delivered of Aroueris, or the elder Horus (Apollo), on the third of Typhon, on the fourth of Isis, and on the fifth of Nephthys, who was called *Teleute*, the Consummation, though others give her the name of *Aphrodite* and *Nike* (Victory). Of these five children, there were three fathers—Helios, Saturn and Mercury. Typhon married Nephthys; Osiris and Isis loved each other even in their mother's womb. Osiris, the good spirit, was persecuted by Typhon, the bad spirit, who, by stratagem, shut him up in a chest, and threw him into the sea. When Isis learned this, she cut off one of her locks, put on mourning garments, and wandered about disconsolate, in search of the chest. Meanwhile she learned that Osiris, on a certain occasion, deceived by Nephthys, who was enamored of him, had mistaken Nephthys for herself, and that the child which was the fruit of this union had been exposed by its mother. Isis therefore sought the child, and bred him up under the name of *Anubis*. The chest in which Osiris was shut up, was, meanwhile, driven ashore at Byblos, and thrown on a bush, which, having suddenly grown into a beautiful tree, had entirely enclosed it. This tree was afterwards cut down by the king of the country as a curiosity, and used as a pillar in his palace. The chest was finally obtained by an artifice of Isis, but the body, being afterwards discovered by Typhon, was torn by him into 14 pieces. On discovering this, Isis proceeded to collect the fragments; she found them all but one, an image of which she therefore formed; and thus the Phallus

came to be held sacred, and a festival was instituted in its honor by the Egyptians. Osiris having returned to life, Isis bore him, prematurely, Harpocrates, the god of silence, who was lame in his lower limbs. Horus, the son of Isis, afterwards vanquished Typhon in a war, and gave him to his mother for safe-keeping. She set him at liberty, on which account Horus tore the crown from her head, instead of which Mercury gave her an ox's head. As the goddess of fecundity, and the universal benefactress, she superintended the cure of human maladies, and, even in Galen's time, several medicines bore her name. After her death, she was revered as the chief of the divinities. According to Herodotus, the Egyptians represented Isis under the form of a woman, with the horns of a cow, as the cow was sacred to her. Another tradition also related, that Isis, in the shape of a young cow, became the mother of Apis, by a ray from heaven (Osiris); that is, the sun and moon sustain the earth. She is also known by the attributes of the *lotus* on her head, and the *sistrum* in her hand, a musical instrument, which the Egyptians used in the worship of the gods. The dress of Isis consists of a close under garment, and a mantle drawn together and fastened in a knot on her breast. Her head is covered with the Egyptian hood. Sometimes, like the Diana of Ephesus, the universal mother, she is represented with a great number of breasts. Among the Romans, Isis afterwards received, in countenance, figure and dress, somewhat of the character of Juno. A foreign character is to be recognised only in the mantle and fringed veil, and other attributes. She was particularly worshipped in Memphis, but, at a later period, throughout all Egypt. A festival of eight days (the festival of Isis) was annually solemnized in her honor, consisting of a general purification. (See *Mysteries*.) It was introduced into Rome, but frequently prohibited on account of the abuses which it occasioned. Under Augustus, the temples of Isis were the theatres of the grossest licentiousness. From Egypt, the worship of this goddess passed over to Greece and Rome. (See *to*, also *Egyptian Mythology* in the article *Hieroglyphics*.)

ISLAM, or, as it is pronounced in Syria, *Eslam*, signifies an entire submission or devotion to the will of another, and especially of God, and thence the attaining of security, peace and salvation. This act is performed, and these blessings are obtained, according to the doctrine of the

Koran, by acknowledging the unity of God, and the apostleship of Mohammed. Every man who makes this profession (*aslama*) is a *Moslem*, i. e. has entirely given himself up to the will of God, and is, on that account, in a state of salvation (*salam*). But as *Muslimáni*, the dual of *Muslim*, is commonly substituted for the singular by the Persians and Turks, the word *Musulmán*, or *Musselman*, has in those, as well as in the European languages, now nearly superseded the shorter and more correct term.—As *Islam* comprehends the practical as well as the doctrinal tenets of the Mohammedan religion—every thing which Moslems must believe and practise—it embraces the whole of their civil and religious polity; for the system of Mohammed relates more to this world than the next, and was designed, like the law of Moses, for the secular as well as the spiritual direction of his followers. But, taken in its more common and direct sense, it signifies the profession of the five fundamental doctrines, on which, according to a traditional declaration of the prophet (Reland, *Rel. Moh.* I. l. p. 5.) the whole edifice of the faith is built. Those five points are—1. the acknowledgment of the Divine Unity and of the prophetic mission of Mohammed; 2. observance of prayer; 3. giving of alms; 4. keeping the fast of Ramadan; and 5. the performance, if possible, of the pilgrimage to Mecca. They are often, also, subdivided and enlarged, in order to arrange them more conveniently into the two classes of belief (*iman*) and practice (*din*). The former relates to—1. God; 2. the angels; 3. the Sacred Book; 4. the prophets; 5. the last day; and 6. the divine decrees: the latter, to—1. purification; 2. prayer; 3. alms; 4. fasting; and 5. the pilgrimage. To the first article of this creed, the Persians and other adherents of Ali add, "Ali is the vicar of God;" and that is the only essential point in which they differ from the Sunnites, or orthodox Musselmans, who acknowledge the authority of the four first khalifs. The disputes concerning the succession to the khalifate, or supremacy of the prophet, spiritual and civil, which arose immediately after his death, split his followers, as is well known, into two distinct sects, the Sunnites and the Shiites, who have never since ceased to hate each other with a cordial animosity; but they differ more in the degree of veneration paid to Ali, than in any other point; and, professing the same creed, with the exception of one article, they derive their doctrines from the same sources. In their

respective rituals, and their interpretation of particular texts, there are many minor differences; but both agree in superadding a traditional to the written law of Mohammed, and both have sanctioned that departure from the original simplicity of his doctrine, the reëstablishment of which was the professed object of the Wahabees. (See *Mohammed*.)

ISLAND; a portion of land less than a continent, and which is entirely surrounded by water. Islands are of very different extent, surface, &c. There are some so large, that authors have doubted whether they should not be called *continents*, as New Holland; this, however, is a mere matter of definition. Borneo, Java, Madagascar, Sumatra, Sicily, Great Britain, Ireland, Iceland, Hayti, Cuba, Newfoundland, are among the most considerable islands, and are capable of containing powerful states; while others, speaking only of those which are inhabited, are only of a few miles in diameter. They differ not less in form than in extent; some being indented with deep bays, and affording fine harbors, and others presenting an almost unbroken line of coast. A cluster of several islands is called an *archipelago*. (q. v.) The principal clusters in the Atlantic are the West Indies, the Azores, the Canaries, the Hebrides, Orkneys, Shetlands, &c. But the great world of islands is in the Pacific, and modern writers have considered them as forming a fifth division of the world, including the Eastern Archipelago, Polynesia and Australia, to which they have given the name of *Oceanica*. (See *Oceanica*.) A large island is a continent in miniature, with its chains of mountains, its rivers, lakes, and is often surrounded by a train of islets. The rivers of islands are in general little more than streams or torrents, and the smaller islands are often uninhabitable from want of water; but they serve as haunts and breeding-places of innumerable sea-birds. There are islands in rivers and lakes, as well as in the sea. In rivers, they are often formed by the division of the stream into various branches, and often by accumulations of earth brought down and deposited around a rocky base. Examples are not wanting of floating islands, which are formed by the roots of plants and trees interlacing with each other, and thus constituting a support for deposits of successive layers of earth. Chains of islands in the neighborhood of continents seem to be often formed by the action of the waters washing away the less solid parts, which once occupied the spaces between

the mountains and rocks which still appear above the surface of the waves. Single islands in the ocean, such as St. Helena, Ascension, &c., and some clusters, as the Canaries, the Azores, &c., appear to owe their origin to the action of submarine fire, which has raised them above the level of the sea. Considerable islands have been known to be suddenly raised from the bed of waters, and soon after to have as suddenly disappeared in the ocean. The Pacific contains a great number of low islands formed of coral reefs, which are sometimes covered with sand, on which a few plants find nourishment. These reefs are formed by the labors of innumerable zoophytes. Submarine islands, as they have been sometimes called, or immense banks of sand, above which there is no great depth of water, are not unfrequent. It has been remarked that islanders have generally some peculiar traits of character, which distinguish them from the inhabitants of continents: it is true that they have often been distinguished by their commercial activity, and their naval skill; but this trait is common to other inhabitants of countries bordering on the sea. The great commercial powers of ancient times were the Phœnicians, the Carthaginians and continental Greeks; of the middle ages, the Italian republics; and the Normans were the most distinguished naval warriors of their time.—A portion of country nearly included between several rivers, is sometimes called an *island*, as the ancient province of the *Isle de France*. The Greeks called such a district by the expressive name of *Mesopotamia*. The Greek word for island is *νησος*, the Latin *insula*, Italian *isola*, Spanish *isla*, French *île*, *ilot*, German *insel* and *eiland*, Danish *oe*, and *ey*, Swedish *ø*, Russian *ostrov*.

ISLAND OF ICELAND SPAR. (See *Lime*.)

ISLANDS OF THE BLESSED, OR FORTUNATE ISLANDS (*Insula Beatorum, Fortunata Insula, Νησοι Μακαρων*); the Elysium of Homer; according to the Grecian mythology, the happy islands which were supposed to lie westward in the ocean, where the favorites of Jupiter, snatched from death, lived in the midst of happiness. According to Hesiod, they were the residence of the fourth race of heroes. In the earliest mythology, the Islands of the Blessed, the Elysian Fields, and the lower world, were in general confounded with each other.

ISLAY, ILAY, OR ILA; one of the Hebrides, or Western Islands of Scotland, to the southwest of Jura, and belonging to the

county of Argyle. It is of an irregular form, about 31 miles in length, and 24 broad. It contains about 154,000 acres, of which one seventh may be stated to be in cultivation. The linen manufacture is carried on to a considerable extent. About 200 tons of kelp are manufactured annually. Population, in 1801, 6821; in 1811, 11,500; in 1821, 16,993. Its inhabitants are rapidly increasing.

ISLE OF FRANCE. (See *France, Isle of*.)

ISLINGTON, a village of England, in the county of Middlesex, and neighborhood of London, is chiefly composed of the dwellings of retired citizens, and other persons connected with the capital. The neighborhood abounds with pleasant walks, the fields being unenclosed, and intersected by the meanders of the New river, while the adjacent tea-gardens and taverns, all in fine open situations, and furnished with bowling-greens, are much visited from the metropolis. Population of the parish, 22,417.

ISMAIL, or ISMAYLOW; a town in Russia, in Bessarabia, on the north side of the Danube, about 33 miles from the Black sea; 144 S. W. Otchakov, 268 N. Constantinople; lon. 28° 50' E.; lat. 45° 21' N. Population, 10,000. The town of Ismail contains 17 mosques, and measures about a mile towards the land, and half a mile by the side of the Danube, and was fortified by eight bastions. The ramparts are, in general, 18 feet in height, in some parts 25. This place was taken by storm (December 22, 1790), by the Russians, under general Suwarrow. The Russians were several times repulsed, and lost, in the siege, 10,000 men. According to the account, as published at Petersburg, the Turkish garrison were put to death after the surrender, and 30,000 men massacred in cold blood. The booty found was immense—230 pieces of cannon, many magazines, powder, bombs and balls, 345 standards, an abundance of provisions, 10,000 horses, &c., to the value, as calculated, of 10,000,000 piastres.

ISNARD, Maximin, was born at Draguignan, in Provence, and his father, a rich tradesman, gave him an excellent education. He was elected to the legislative assembly by the department of the Var (1791), and, as soon as he took his seat, he attacked the priests and emigrants with the utmost severity. He also supported the impeachment of the king's brothers, voted against the minister Delessart, accused the court of counter-revolutionary projects, and, in a variety of other

instances, displayed his hostility to the government. He was returned as a deputy to the convention, and he voted for the death of the king. In that assembly, Isnard belonged to the Brissotine or Girondist (q. v.) party, and, in the struggle which took place with the Jacobins, he manifested an undaunted courage, and an impetuous and powerful eloquence. May 16, 1793, he was chosen president of the convention. He was not comprised in the proscription of his party on the 2d of June; but the revolutionary tribunal issued an order for arresting him, and, as he escaped, they outlawed him. Isnard, however, was concealed by a friend till after the fall of Robespierre. He then quitted his asylum, and resumed his seat in the convention. Shortly after this, he was sent on a mission into the south of France; and he took a decisive part against the terrorists, who had committed such atrocious enormities in that quarter. He is even accused of having incited the oppressed to carry their vengeance beyond all reasonable bounds. Some young men having complained to him that they had no arms with which to oppose the terrorists, he exclaimed "You have no arms! Open the ground, draw forth the bones of your fathers, and rush on their assassins!" Isnard was elected a member of the council of five hundred, but quitted it in 1797, and was afterwards employed in the tribunals of the Var. He is the author of some political pamphlets, of an account of his own proscription, of a work On the Immortality of the Soul, and of a Dithyrambic on the Immortality of the Soul. Not having accepted any office during the hundred days, he was allowed to remain in France.

ISOCRATES; one of the most distinguished Greek orators, born at Athens, 436 B. C. His principal teachers were Gorgias, Prodicus and Protagoras. On account of his weak voice and natural timidity, he was reluctant to speak in public; but he applied himself with the greatest ardor to instruction in the art of eloquence, and preparing orations for others. He derived a considerable profit from this occupation, as is evident from the fact, that he received a present of 20 talents (about 18,000 dollars) for a speech that he wrote for Nicocles, king of Cyprus. In his childhood, he was the companion of Plato, and they remained friends during their whole lives. He had a great veneration for Socrates. After the death of Socrates, which filled his scholars with fear and horror, he alone had the courage

to appear in mourning. He gave another proof of his courage, by publicly defending Theramenes, who had been proscribed by the thirty tyrants. This courage, however, seems to have deserted him; for he never after ventured to appear publicly and take part in the popular assemblies. This was the reason why he never attained to the offices, to which, in Athens, public eloquence afforded the only passport; but eloquence, nevertheless, owed much to his services. He was particularly distinguished for a polished style and a harmonious construction of his sentences. The composition, revision, and repeated polishing of his speeches, occupied so much time, that he published little. His celebrated panegyric on Athens (*Panathenæicus*) employed him 10 years. The critics of his time objected to him, that his style was often prolix and overloaded with ornament; that he aimed rather at pleasing the ear than moving the heart; that he made the sense subservient to the sound, and often used unmeaning expressions and unappropriate figures to round off his periods. As all his speeches were modelled after the same pattern, their sameness excited weariness. His subjects were the most important points of morals and politics. His admonitions to princes were so gentle, that they could not be offended by them, and even bestowed favors on the author. He knew how to flatter them in the most delicate manner. A proof of this is afforded by the letter which he wrote, when 90 years of age, to the Macedonian king Philip. Yet his desire for the freedom of Greece was so intense, that he starved himself to death, in his 98th year, from grief at the unhappy battle of Cheronæa. In Plutarch's time, 60 orations went under his name, not half of which were, however, deemed genuine. Twenty-one now remain, of which the principal are the *Panegyricus* (an oration in which he exhorts the Greeks to concord, and to war against the Persians, edited by Morus and Spohn, Leipsic, 1817, Pinzger and Dindorf, 1825 and 1826), and the *Panathenæicus*. Ten letters are also extant. The latest editions of all his orations are those of Lange (Halle, 1803) and of Coray (Paris, 1806, two volumes). Of the older editions, those of H. Wolf, of Henry Stephens, Bekker, and Battie are the best.

ISOGRAPHY (from the Greek *ἴσος*, equal, similar, and *γράφω*, to write); the imitation of handwriting. As it is too expensive and difficult for many persons to collect autographs (q. v.) of famous persons,

it is agreeable to have at least fac-similes or isographs. An interesting work was completed in the year 1830, called *Iso-graphie des Hommes célèbres* (Paris), containing several hundred fac-simile copies of autograph letters and signatures. Some years ago, Mr. Thane published a work under the title *British Autography*, containing a collection of portraits of celebrated English characters, with the fac-simile of their autographs under each; and Mr. Nichols is publishing another work of the kind. It has been often asserted, that some judgment could be formed of a man's character from his handwriting, and there exists a small French publication—*L'Art de juger les Hommes par leur Ecriture*—a new reason for authors to be thankful for the invention of printing.

ISOUARD, Nicolo. (See *Nicolo*.)

ISPAHAN, ISFAHÁN, or SPAHAWN (anciently *Aspadona*); a city of Persia, in Irak, formerly the capital of the whole country; 260 miles N. E. Bassora; lon. 51° 50' E.; lat. 32° 25' N. The population was formerly estimated by some travellers, probably with much exaggeration, at 1,100,000. Chardin, in 1686, stated it at 600,000. According to Olivier, it was reduced, in 1796, to 50,000. In 1800, it was stated at 100,000. Morier stated it in 1808, from Persian authorities, at 400,000; but, in his second journey, at 60,000. Kinnier states it at 200,000. According to Chardin, the walls were 24 miles in circuit, and contained 162 mosques, 48 colleges, 1802 caravansaries, and 273 public baths. A great part of the city is at present a mass of ruins, with here and there an inhabited house. It is situated on the river Zenderout. Under the caliphs of Bagdad, it became the capital of the province of Irak. Being situated in the centre of the empire, and surrounded by the most fertile territories, it soon became a place of great population, wealth and trade. In 1387, it was taken by Tinur Bec, and the citizens were given up to indiscriminate massacre, and 70,000 are said to have perished. Shah Abbas made it the seat of his empire, and spared no cost in embellishing it with the most splendid edifices. In 1722, it was taken by the Afghans; but, in 1727, it was retaken by Nadir Shah, since which it has not been a royal residence. The great palace built by Shah Abbas, is said to have been five miles in circuit, a great part of which space, however, was laid out in 10 gardens, adorned with summer houses and other elegant structures.

The walls and buildings of this palace remain nearly entire, but it has been stripped of nearly all its costly furniture, and every thing valuable that could be removed. The square called Meyden was equally distinguished, one third of a mile in length, formerly encircled by a canal, bordered with plane trees; but all vestiges of both are now obliterated. Another remarkable object is the Chaur Baug (four gardens), a name given to an avenue of more than a mile, reaching from the Meyden to the mountains east of Ispahan, composed of four rows of large and beautiful plane trees, with canals and basins to receive the waters of the Zenderout. There are several handsome bridges in the city, and the mosques display great magnificence. The private buildings have a mean appearance, built of bricks dried in the sun, but within they are handsome and convenient. The streets are narrow, winding, irregular, unpaved, and very dusty. When Ispahan was in its prosperity, its suburbs were distinguished for their extent and beauty. The principal one, Julfa, is now reduced from 12,000 to 600 families—Armenians, Circassians and Georgians. The manufactures of the city are still extensive, and it is famous for its gold brocade. It is also the emporium of the inland commerce of Persia.

ISRAEL AND ISRAELITES. (See *Jacob*, and *Hebrews*.)

ISRAELITE CHRISTIANS; the Jews converted to Christianity in Russia. An imperial decree of March 25, 1817, imparted to them perfect freedom in the choice of their Christian confession, portions of the public lands for the establishment of colonies, freedom to exercise mechanical arts without restraint, full civil rights, independence of the local authorities, government by magistrates chosen by themselves, who were immediately subordinate to an imperial board of control, exemption from military and civil service, from furnishing quarters to soldiers, from supporting the posts, and from all taxes for 20 years, when they are to be placed on an equality with other subjects. According to the denomination of the Christian confessions selected by them, they must form distinct parishes, in which no foreign Christian or Jew may settle, though every foreign proselyte may be admitted after the payment of his debts.

ISSUE. The plaintiff and defendant, in a suit at law, are said to be *at issue*, when something is affirmed by one of them,

which is denied by the other. The subject of this affirmation and denial may be either matter of fact or matter of law. If the defendant intends to dispute the truth of the statement whereon the plaintiff grounds his complaint, he denies either the whole of the statement, or some one material fact contained in it, which, in technical language, is called *traversing*. He then appeals to the decision of a jury, which is called *putting himself upon the country*. Although the plaintiff's statement be true, it does not necessarily follow that it discloses sufficient grounds for complaint against the defendant. If it does not so, the defendant admits the truth of the facts, but denies their sufficiency in law to support the action. In this case, he appeals to the decision of the judges; for the jury merely decides questions which involve matters of fact. Questions of mere law fall beneath the cognizance of the judges. When either the plaintiff or the defendant admits the facts, but denies the law of the other, he is said to *demur*. Although the plaintiff's statement, so far as it goes, be both true in point of fact, and sufficient in point of law, the defendant may still have a good defence; for the plaintiff may have stated the truth, but not the whole truth. Some facts may be suppressed, which, when explained by the defendant, may turn the scale in his favor. If this counter-statement of the defendant is insufficient in point of law as a defence, the plaintiff demurs; but if it is sufficient in point of law, he must either deny the facts, or allege some other facts to counterbalance them. By these means, the parties in the cause must ultimately arrive at some point, either of law or fact, at which they are at issue, and judgment will be given for that party in whose favor the issue is decided. The statements and counter-statements of the parties are called the *pleadings*, and each particular stage in the pleadings has a name appropriated to itself. These names are, 1. the *declaration*; 2. the *plea*; 3. the *replication*; 4. the *rejoinder*; 5. the *surrejoinder*; 6. the *rebutter*; and 7. the *surrebutter*. The first, third, fifth and seventh names belong to the pleadings of the plaintiff; the second, fourth and sixth to the defendant. Issue is generally taken before the parties arrive at a surrebutter. In former times, the pleadings were conducted, *vis à voce*, in open court, and the judges presided, like moderators, during the dispute, until the parties arrived at an issue; but they are now drawn up in writing out of court, and are then filed by

the attorneys in the proper offices attached to the court. The judges now hear nothing of them until the issue of fact comes on for trial, or the issue at law for argument. If the existence of a particular record is put in issue, it must be produced by the party who affirms its existence; and the court, at the time appointed for its production, decides the issue without the intervention of a jury. This is one of the very rare cases where the jury are not the sole judges on questions of fact. There is a rule of pleading, that only one material fact shall be put in issue in one plea. To this rule the *general issue* forms a wide exception. When a special plea is pleaded, evidence is only admissible as to the truth or falsehood of the particular fact which is the subject of that plea; but the general issue is a species of plea which usually compels the plaintiff to prove his whole case to the satisfaction of a jury, and, at the same time, enables the defendant to prove any circumstances whatever which discharge his liability. Thus, if an action be brought against a man for the price of goods which the plaintiff alleges that the defendant bought, if the defendant has become a bankrupt since the purchase, he may plead that fact specially, and then the evidence is confined to the single question—Has he or has he not become bankrupt? But if he pleads the general issue, then he may prove either that he never bought the goods, or that he paid for them, or that he returned them to the plaintiff on finding them to be of an inferior quality, or, in short, any thing else which is a bar to the action. The form of the general issue, in this case, is simply "that the defendant did not promise or undertake in manner and form as the plaintiff has complained against him." Owing to this latitude allowed to the general issue, it sometimes happens that plaintiffs are taken by surprise at the trial, by the defendant setting up an unexpected defence, which the plaintiff, on the spur of the moment, is unable to disprove. When this is proved to the satisfaction of the judges, they will, if the justice of the case require it, grant a new trial.

ISTAKHAR. (See *Persepolis*.)

ISTAMBOL. (See *Constantinople*.)

ISTHMIAN GAMES; so called because they were celebrated on the isthmus of Corinth, which joins the Peloponnesus to the continent. On it was a famous temple consecrated to Neptune, near which the Isthmian games were celebrated. On one side of the temple were the statues of

the victors in these games, and on the other stood four horses, gilded all over, with the exception of their ivory hoods: by the side of the horses were two Tritons, the upper parts of which were gilt, and the rest of ivory. Behind the horses was a car, with the statues of Neptune and Amphitrite, of gold and ivory. Not far from the temple were a considerable theatre, and the stadium, of white stone, in which the games were celebrated. The whole isthmus was sacred to Neptune, who was thence called *Isthmius*. According to the common opinion, the Isthmian games were founded in honor of Palæmon or Melicerta. (See *Ino*.) Others relate that Theseus established them in honor of Neptune. They were originally held in the night, and had perhaps fallen into disuse, when Theseus restored them, and ordered them to be celebrated in the day. As Theseus was either the founder or the restorer of these games, the Athenians had the precedence in them. All Greece took part in them, excepting the Eleans, whose absence was thus explained:—As the sons of Actor were riding to these games, they were killed, near Elea, by Hercules. Their mother, Melione, discovered the murderer, who then resided in the territory of Argos. She therefore demanded satisfaction of the Argives, and, on their refusal to grant it, requested the Corinthians not to admit them to the games, as disturbers of the public tranquillity. As they would not yield to her solicitations, Melione pronounced direful curses on all the Eleans, if they should ever participate in these games. They were celebrated, with the same splendor as the Olympian and other public games, twice in each Olympiad, probably in autumn: the athletic exercises were the same. The victors were at first adorned with wreaths of pine branches, but afterwards with wreaths of dry and faded ivy. The pine wreaths were afterwards resumed.

ISTRIA (anciently *Histria*); peninsula, Austrian empire, in Illyria; bounded on all sides by the sea, except towards the north, where it is joined to Carniola. It was anciently a part of Illyricum. Population, 140,749; square miles, 1570; of this, more than two thirds formerly belonged to the republic of Venice. It is a rich, fertile tract. The occupation of the inhabitants consists in agriculture, the culture of wine and oil, the rearing of bees, the manufacturing of silk, leather, tallow, salt, and also in fishing. The chief towns are Rovigno, Capo d'Istria, and Fiume.

Istria was confirmed to Austria in 1814.

ITALY, once the seat of universal empire, but which, since the overthrow of the Roman power, has never formed an independent whole, the pride of its inhabitants and the admiration of foreigners, on account of its delicious climate and former renown, is a narrow peninsula, extending from the Alps (46° to 38° N. lat.) into the Mediterranean sea, which, on the east side of Italy, is called the *Adriatic*, on the west, the *Tuscan sea*. The Apennines (q. v.), rising near the maritime Alps (q. v.), are the principal chain of mountains, and stretch through the country, dividing Lombardy from the Genoese territories and Tuscany, and Tuscany from Romagna, intersecting the States of the Church, and running through the kingdom of Naples to the strait of Messina. Upper Italy (Lombardy) is remarkably well watered. The Po, which receives a great number of rivers from the large lakes at the foot of the Alps (lago Maggiore, di Lugano, di Como, d'Iseo and di Garda), and the Adige, are the principal rivers. They both rise in the Alps, and flow into the Adriatic sea. In Middle It-

aly (Tuscany and the States of the Church), are the Arno and the Tiber, which rise in the Apennines, and flow into the Tuscan sea. In Lower Italy (Naples) there are no large rivers, on account of the shortness of the course of the streams from the mountains to the sea: the Garigliano is the principal. The climate is warm, without excessive heat, and generally salubrious. The winter, even in Upper Italy, is very mild: in Naples, it hardly ever snows. The abundance and excellence of the productions of the soil correspond with the beauty of the climate. In many places, both of the north and south, there are two and even three crops a year. The volcanic character of the coasts of Lower Italy is particularly remarkable in a geological point of view, especially in the region of Puzzuoli and Vesuvius. The neighboring islands of the Mediterranean are distinguished by the same character. The present number of inhabitants is much inferior to the former population of this delightful country. The following table, copied from Mr. Balbi's different publications, is taken from the *Revue Britannique* :

Political Divisions.	Surface in sq. Miles, 60 to the Degree.	Population at the Beginning of 1827.	Revenue in Dollars, about	Army in 1827.
<i>Independent Italy</i> ,	72,902	16,060,500	36,035,800	66,940
Kingdom of the Two Sicilies,	31,800	7,420,000	15,000,000	30,000
Kingdom of Sardinia,*	18,180	3,800,000	10,700,000	23,000
States of the Church,	13,000	2,590,000	5,350,000	6,000
Grand-duchy of Tuscany,	6,324	1,275,000	3,030,000	4,000
Duchy of Parma,	1,660	440,000	820,000	1,320
Duchy of Modena, with Massa and Carrara,	1,571	379,000	713,000	1,780
Duchy of Lucca,	312	143,000	340,000	800
Republic of St. Marino,	17	7,000	11,500	40
Principality of Monaco,	38	6,500	71,300	
<i>Italy subject to Foreign Powers</i> ,	22,030	5,337,000	22,623,000	52,120
Austrian Italy (Lombardo-Venetian kingdom, Italian Tyrol, and part of the government of Trieste),	17,800	4,930,000	21,800,000	50,000
French Italy (island of Corsica),	2,852	185,000	208,000	
Swiss Italy (canton of Tessin, some parts of the Grisons, and of the Valais),	1,250	126,000	98,000	2,120
English Italy (the group of Malta),	128	96,000	517,000	
<i>Total</i> ,	94,932	21,397,500	58,658,800	119,060

The national character of the Italians, naturally cheerful, but always marked by strong passions, has been rendered,

* Savoy is not included here, not being considered a part of Italy by the *Revue*.

by continued oppression, dissembling and selfish. The Italian, moreover, possesses a certain acuteness and versatility, as well as a love of money, which stamp him for a merchant. In the middle ages, Venice,

crowned king in 894, and emperor in 915, did not enjoy quiet till he had expelled the emperor Louis III (905), and vanquished another competitor, Rodolph of Upper Burgundy: he was even then unable, on account of the feeble condition of the state, to defend the kingdom effectually against the invasions of the Saracens (from 890) and the Hungarians (from 899). After the assassination of Berengarius (924), Rodolph II relinquished his claims to Hugh, count of Provence, in exchange for that country. Hugh sought to strengthen the insecure throne of Italy by a bloody tyranny. His nephew, Berengarius, marquis of Ivrea, fled from his snares to Otho the Great of Germany (940), assembled an army of fugitives, returned, and overthrew Hugh (945), who was succeeded by his son Lothaire. Berengarius became his first counsellor. But, after the death of Lothaire, in 950 (poisoned, it was said, by Berengarius), the latter wished to compel his widow—the beautiful Adelaide—contrary to her inclination, to marry his son. Escaping from his cruelty and her prison, she took refuge in the castle of Canossa, where she was besieged by Berengarius II. She now applied for aid to Otho I, king of Germany, who passed the Alps, liberated her, conquered Pavia, became king of the Franks and Lombards (in 951), and married Adelaide. To a prompt submission, and the cession of Friuli, the key of Italy, which Otho gave to his brother Henry, Berengarius was indebted for permission to reign as the vassal of Otho. But, the nobles of Italy preferring new complaints against him, 10 years after, Otho returned (961), deposed him, and led him prisoner to Bamberg, and, after having been himself crowned king of Italy with the iron crown, in 961, united this kingdom with the German. Otho gave the great imperial fiefs to Germans, and granted to the Italian cities privileges that were the foundation of a free constitution, for which they soon became ripe. The growing wealth of the papal court, owing to the munificence of the French kings, which had promoted their influence on the government, so beneficial under Leo IV, and popes of a similar character, became, through the corruption of the Roman court, in the 10th century, the first cause of its decline. The clergy and the people elected the popes according to the will of the consuls and a few patricians. In the first half of the 10th century, two women disposed of the holy chair. Theodora elevated (914) her lover, John X, and Marozia, the

daughter of Theodora, elevated her son, John XI, to the papal dignity. The brother of the latter, Alberic of Camerino, and his son Octavian, were absolute masters of Rome, and the last was pope, under the name of John XII, when 20 years of age (956). Otho the Great, whom he had crowned emperor in Rome, in 962, deposed him, and chose Leo VIII in his stead; but the people, jealous of its right of election, chose Benedict V. From this time, the popes, instead of ruling the people of Rome, became dependent on them. In Lower Italy, the republics of Naples, Gaeta and Amalfi still defended their independence against the Lombard duchy of Benevento, with the more ease, since the duchy had been divided (839) between Siconolphus of Salerno and Radelghisius of Benevento, and subsequently among a greater number, and since with the dukes they had had a common enemy in the Saracens, who had been previously invited over from Sicily by both parties (about 830), as auxiliaries against each other, but who had settled and maintained themselves in Apulia. The emperors Louis II and Basilius Macedo had, with combined forces, broken the power of the Mussulmans (866); the former was, nevertheless, unable to maintain himself in Lower Italy, but the Greeks, on the contrary, gained a firmer footing, and formed, of the regions taken from the Saracens, a separate province, called the *Thema of Lombardy*, which continued under their dominion, though without prejudice to the liberty of the republics, upwards of a hundred years, being governed by a catapan (governor-general) at Bari. Otho the Great himself did not succeed in driving them altogether from Italy. The marriage of his son, Otho II, with the Greek princess Theophania, put an end to his exertions for this purpose, as did the unfortunate battle at Basentello to the similar attempts renewed by Otho II (980).

Fourth Period.—From Otho the Great to Gregory VII (1073). *The Dominion of the German Kings.* In opposition to the designs of the count of Tusculum, who wished to supplant the absent emperor at Rome, a noble Roman, the consul Crescentius, attempted to govern Rome under the semblance of her ancient liberty (980). Otho II, king since 973, occupied with his projects of conquest in Lower Italy, did not interfere with this administration, which became formidable to the vicious popes Boniface VII and John XV. But, when Otho III, who had reigned in Germany since 983, raised his kinsman Greg-

bardly, which received its name from them, almost without a blow. Their government was less favorable to the arts and sciences than that of the Goths.

Second Period.—From Alboin to Charlemagne (774), or Period of the Lombard Empire. The kingdom of the Lombards included Upper Italy, Tuscany and Umbria. Alboin also created the duchy of Benevento, in Lower Italy, with which he invested Zotto. The whole of Lombardian Italy was divided into 30 great fiefs, under dukes, counts, &c., which soon became hereditary. Together with the new kingdom, the confederation of the fugitives in the lagoons still subsisted in undisturbed freedom. The islanders, by the election of their first doge, Anafesto, in 697, established a central government; and the republic of Venice was founded. (See *Venice*.) Ravenna, the seat of the exarch, with Romagna, the Pentapolis, or the five maritime cities (Rimini, Pesaro, Fano, Sinigaglia and Ancona), and almost all the coasts of Lower Italy, where Amalfi and Gaeta had dukes of their own, of the Greek nation, remained unconquered, together with Sicily and the capital, Rome, which was governed by a patrician in the name of the emperor. The slight dependence on the court of Byzantium disappeared almost entirely in the beginning of the eighth century, when Leo the Isaurian exasperated the orthodox Italians, by his attack on images. (See *Iconoclasts*.) The cities expelled his officers, and chose consuls and a senate, as in ancient times. Rome acknowledged, not indeed the power, but a certain paternal authority of its bishops, even in secular affairs, in consequence of the respect which their holiness procured them. The popes, in their efforts to defend the freedom of Rome against the Lombards, forsaken by the court of Byzantium, generally had recourse to the Frankish kings. In consideration of the aid expected against king Astolphus, pope Stephen III (753) not only anointed Pepin, who had been made king of the Franks, in 752, with the approbation of pope Zacharias, but, with the assent of the municipality of Rome, appointed him patrician, as the imperial governor had hitherto been denominated. Charlemagne made war upon Desiderius, the king of the Lombards, in defence of the Roman church, took him prisoner in his capital, Pavia, united his empire with the Frankish monarchy (774), and eventually gave Italy a king in his son Pepin. But his attempts against the duchy of Benevento, the independence of

which was maintained by duke Arichis, and against the republics in Lower Italy, where Naples, Amalfi and Gaeta in particular, had become rich by navigation and commerce, were unsuccessful. The exarchate, with the five cities, had already been presented to the pope by Pepin, in 756, and Charlemagne confirmed the gift, but the secular supremacy of the popes was first completed by Innocent III, about 1200.

Third Period.—From Charlemagne to Otho the Great (961), or Period of the Carolingians and Interregnum. Leo III bestowed on the king of the Franks, on Christmas day, A. D. 800, the imperial crown of the West, which needed a Charlemagne to raise it from nothing. But dislike to the Franks, whose conquest was looked upon as a new invasion of barbarians, united the free cities, Rome excepted, more closely to the Eastern Empire. Even during the lifetime of Charlemagne, Frankish Italy was given to his grandson Bernard (810). But, Bernard having attempted to become independent of his uncle, Louis the Debonnaire, he was deprived of the crown, and his eyes were torn out. Italy now remained a constituent part of the Frankish monarchy, till the partition of Verdun (843), when it was allotted, with the imperial dignity, and what was afterwards called *Lorraine*, to Lothaire I, eldest son of Louis. Lothaire left the government (850) to his son Louis II, the most estimable of the Italian princes of the Carolingian line. After his death (875), Italy became the apple of discord to the whole family. Charles the Bald of France first took possession of it, and, after his death (877), Carloman, king of Bavaria, who was succeeded, in 880, by his brother Charles the Fat, king of Suabia, who united the whole Frankish monarchy for the last time. His dethronement (887) was the epoch of anarchy and civil war in Italy. Berengarius, duke of Friuli, and Guido, duke of Spoleto (besides the marquis of Ivrea, the only ones remaining of the 30 great vassals), disputed the crown between them. Guido was crowned king and emperor, and, after his death (894), his son Lambert. Arnold, the Carolingian king of the Germans, enforced his claims to the royal and imperial crown of Italy (896), but, like most of his successors, was able to maintain them only during his residence in the country. After the death of Lambert and Arnold (898 and 899), Louis, king of Lower Burgundy, became the competitor of Berengarius I; and this bold and noble prince, although

crowned king in 894, and emperor in 915, did not enjoy quiet till he had expelled the emperor Louis III (905), and vanquished another competitor, Rodolph of Upper Burgundy: he was even then unable, on account of the feeble condition of the state, to defend the kingdom effectually against the invasions of the Saracens (from 890) and the Hungarians (from 899). After the assassination of Berengarius (924), Rodolph II relinquished his claims to Hugh, count of Provence, in exchange for that country. Hugh sought to strengthen the insecure throne of Italy by a bloody tyranny. His nephew, Berengarius, marquis of Ivrea, fled from his snares to Otho the Great of Germany (940), assembled an army of fugitives, returned, and overthrew Hugh (945), who was succeeded by his son Lothaire. Berengarius became his first counsellor. But, after the death of Lothaire, in 950 (poisoned, it was said, by Berengarius), the latter wished to compel his widow—the beautiful Adelaide—contrary to her inclination, to marry his son. Escaping from his cruelty and her prison, she took refuge in the castle of Canossa, where she was besieged by Berengarius II. She now applied for aid to Otho I, king of Germany, who passed the Alps, liberated her, conquered Pavia, became king of the Franks and Lombards (in 951), and married Adelaide. To a prompt submission, and the cession of Friuli, the key of Italy, which Otho gave to his brother Henry, Berengarius was indebted for permission to reign as the vassal of Otho. But, the nobles of Italy preferring new complaints against him, 10 years after, Otho returned (961), deposed him, and led him prisoner to Bamberg, and, after having been himself crowned king of Italy with the iron crown, in 961, united this kingdom with the German. Otho gave the great imperial fiefs to Germans, and granted to the Italian cities privileges that were the foundation of a free constitution, for which they soon became ripe. The growing wealth of the papal court, owing to the munificence of the French kings, which had promoted their influence on the government, so beneficial under Leo IV, and popes of a similar character, became, through the corruption of the Roman court, in the 10th century, the first cause of its decline. The clergy and the people elected the popes according to the will of the consuls and a few patricians. In the first half of the 10th century, two women disposed of the holy chair. Theodora elevated (914) her lover, John X, and Marozia, the

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Fourth Period.—From Otho the Great to Gregory VII (1073). *The Dominion of the German Kings.* In opposition to the designs of the count of Tusculum, who wished to supplant the absent emperor at Rome, a noble Roman, the consul Crescentius, attempted to govern Rome under the semblance of her ancient liberty (980). Otho II, king since 973, occupied with his projects of conquest in Lower Italy, did not interfere with this administration, which became formidable to the vicious popes Boniface VII and John XV. But, when Otho III, who had reigned in Germany since 983, raised his kinsman Greg-

ory V to the popedom, Crescentius caused the latter to be expelled, and John XVI, a Greek, to be elected by the people. He also endeavored to place Rome again under the nominal supremacy of the Byzantine empire. Otho, however, reinstated Gregory, besieged Crescentius in the castle of St. Angelo, took him prisoner, and caused him to be beheaded with 12 other noble Romans (998). But the Romans again threw off their allegiance to the emperor, and yielded only to force. On the death of Otho III (1002), the Italians considered their connexion with the German empire as dissolved. Harduin, marquis of Ivrea, was elected king, and crowned at Pavia. This was a sufficient motive for Milan, the enemy of Pavia, to declare for Henry II (in Italy, I) of Germany. A civil war ensued, in which every city, relying on its walls, took a greater or less part. Henry was chosen king of Italy, by the nobles assembled in Pavia; but disturbances arose, in which a part of the city was destroyed by fire (A. D. 1004). Not till after Harduin's death (1015) was Henry recognised as king by all Lombardy; he was succeeded by Conrad II (in Italy, I). At a diet held at Roncaglia, near Piacenza, in 1037, Conrad made the fiefs hereditary by a fundamental law of the empire, and endeavored to give stability and tranquillity to the state, but without success. The cities (which were daily becoming more powerful) and the bishops were engaged in continual quarrels with the nobility, and the nobility with their vassals, which could not be repressed. Republican Rome, under the influence of the family of Crescentius, could be reduced to obedience neither by Henry II and Conrad II nor by the popes. When Henry III (in Italy, II), the son and successor of Conrad (1039), entered Italy (1046), he found three popes in Rome, all of whom he deposed, appointed in their stead Clement II, and ever after filled the papal chair, by his own authority, with virtuous German ecclesiastics. This reform gave the popes new consequence, which afterwards became fatal to his successor. Henry died in 1056. During the long minority of his son Henry IV (in Italy, III), the policy of the popes, directed by the monk Hildebrand (afterwards Gregory VII), succeeded in creating an opposition, which soon became formidable to the secular power. (See *Pope*.) The Normans also contributed to this result. As early as 1016, warriors from Normandy had established themselves in Calabria and Apulia. Allies sometimes of the Lom-

bards, sometimes of the republics, sometimes of the Greeks against each other and against the Saracens, they constantly became more powerful by petty wars. The great preparations of Leo IX for their expulsion terminated in his defeat and capture (1053). On the other hand, Nicolas II united with the Norman princes, and, in 1059, invested Robert Guiscard with all the territories conquered by him in Lower Italy. From that time, the pope, in his conflicts with the imperial power, relied on the support of his faithful vassal, the duke of Apulia and Calabria, to which Sicily was soon added. While the small states of the south were thus united into one large one, the kingdom in the north was dissolving into smaller states. The Lombard cities were laying the foundation of their future importance. Venice, Genoa and Pisa were already powerful. The Pisanese, who, in 980, had given to Otho II efficient aid against the Greeks in Lower Italy, and, in 1005, boldly attacked the Saracens there, ventured, in connexion with the Genoese (no less warlike and skilled in navigation), to assail the infidels in their own territory, and twice conquered Sardinia (1017 and 1050), which they divided into several large fiefs, and distributed them among their principal citizens.

Fifth Period.—From Gregory VII to the Fall of the Hohenstaufen. Struggles of the Popes and Republics with the Emperors. Gregory VII humbled Henry IV in 1077. Urban II instigated the emperor's own sons against their father. Conrad, the eldest, was crowned king of Italy in 1093, after whose death (1101) Henry, the second son, succeeded in deposing his father from the imperial throne. Henry V, the creature of the pope, soon became his opponent; but, after a severe conflict, concluded with him the concordate of Worms (1122). A main point, which remained unsettled, gave rise to new difficulties in the 12th and 13th centuries—the estate of Matilda, marchioness of Tuscany, who (died 1115), by a will, the validity of which was disputed by the emperor, bequeathed all her property to the papal see. Meanwhile, in the south, the Norman state (1130), under Roger I, was formed into a kingdom, from the ruins of republican liberty and of the Greek and Lombard dominion. (See *Sicilies, the Two*.) In the small republics of the north of Italy, the government was, in most cases, divided between the consuls, the lesser council (*credenza*), the great council, and the popular assembly (*parlamento*). Petty feuds

developed their youthful energies. Such were those that terminated with the destruction of Lodi by Milan (1111), and the ten years' siege of Como by the forces of all the Lombard cities (1118—1128). The subjugation of this city rendered Milan the first power in Lombardy, and most of the neighboring cities were her allies. Others formed a counter alliance with her antagonist, Pavia. Disputes between Milan and Cremona were the occasion of the first war between the two unions (1129), to which the contest of Lothaire II and Conrad of Hohenstaufen for the crown, soon gave another direction. This was the origin of the Ghibelines (favorers of the emperor) and the Guelfs (the adherents of the family of Guelfs (q. v.), and, in general, the party of the popes). In Rome, the love of liberty, restrained by Gregory VII, rose in proportion as his successors ruled with less energy. The schisms between Gelasius II and Gregory VIII, Innocent II and Anacletus II, renewed the hopes of the Romans. Arnold of Brescia, formerly proscribed (1139) for his violent attacks against the luxury of the clergy in that country, was their leader (1146). After eight years, Adrian IV succeeded in effecting his execution. Frederic I of Hohenstaufen (called *Barbarossa*) crossed the Alps six times, in order to defend his possessions in Italy against the republicanism of the Lombard cities. Embracing the cause of Pavia as the weaker, he devastated (1154) the territory of Milan, destroyed Tortona, and was crowned in Pavia and Rome. In 1158, he reduced Milan, demolished the fortifications of Piacenza, and held a diet at Roncaglia, where he extended the imperial prerogatives conformably with the Justinian code, gave the cities chief magistrates (*podestà*), and proclaimed a general peace. His rigor having excited a new rebellion, he reduced Crema to ashes (1160), compelled Milan to submission, and, having driven out all the inhabitants, demolished the fortifications (1162). Nothing, however, but the terror of his arms upheld his power. When the emperor entered Italy (1163) without an army, the cities concluded a union for maintaining their freedom, which, in 1167, was converted into the Lombard confederacy. The confederates restored Milan, and, to hold in check the Ghibeline city of Pavia, built a new city, called, in honor of the pope, *Alessandria*. Neither Frederic's governor, Christian, archbishop of Mentz, nor he himself, could effect any thing against the confederacy; the former failed before

Ancona (1174), with all the power of Ghibeline Tuscany; and the latter, with the Germans, before Alexandria (1175). He was also defeated by Milan, at Legnano, in 1176. He then concluded a concordate with Alexander III, and a truce with the cities (1176), at Venice, and a peace, which secured their independence, at Constance (1183). The republics retained the *podestà* (foreign noblemen, now elected by themselves) as judges and generals. As formerly, all were to take the oath of fealty and allegiance to the emperor. But, instead of strengthening their league into a permanent confederacy (the only safety for Italy), they were soon split into new factions, when the designs of the Hohenstaufen on the throne of Sicily drew Frederic and Henry VI (V) from Lombardy. The defeat of the united forces of almost all Lombardy, on the Oglio, by the inhabitants of Brescia, though inferior in numbers, is celebrated under the name of *La mala morte* (1197). Among the nobles, the Da Romano were the chiefs of the Ghibelines, and the marquises of Este of the Guelfs. During the minority of Frederic II, and the disputes for the succession to the German throne, Innocent III (Frederic's guardian) succeeded in reëstablishing the secular authority of the holy see in Rome and the surrounding country, and in enforcing its claims to the donations of Charlemagne and Matilda. He also brought over almost all Tuscany, except Pisa, to the party of the Guelfs (1197). A blind hereditary hatred, rather than a zeal for the cause, inspired the parties; for when a Guelf (Otho IV) ascended the imperial throne, the Guelfs became his party, and the Ghibelines the pope's; but the reversion of the imperial crown to the house of Hohenstaufen, in the person of Frederic II, soon restored the ancient relations (1212). In Florence, this party spirit gave pretence and aliment (1215) to the disputes of the Buondelmonti and Donati with the Uberti and Amidei, originating in private causes; and most cities were thus internally divided into Guelfs and Ghibelines. The Guelf cities of Lombardy renewed the Lombard confederacy, in 1226. The Dominican, John of Vicenza, attacked these civil wars. The assembly at Paquara (1233) seemed to crown his exertions with success; but his attempt to obtain secular power in Vicenza occasioned his fall. After the emperor had returned from his crusade (1230), he waged war, with varying success, against the cities and against Gregory IX, heedless of the excommunication, while Ezze-

lin da Romano, under the pretence of favoring the Ghibelines, established, by every kind of violence, his own power in Padua, Verona, Vicenza and the neighborhood. The papal court succeeded in seducing the Pisanese family of the Visconti of Gallura in Sardinia, from the republic, and rendering them its vassals, notwithstanding the resistance of the public, and especially of the counts of Gherardesca. Thence Pisa, too, was divided into Ghibelines (Conti) and Guelfs (Visconti). Frederic, however, married his natural son, Enzius, to a Visconti, and gave him the title of *king of Sardinia*. The plan of Gregory IX, to depose Frederic, was successfully executed by Innocent IV, in the council of Lyons (1245). This completely weakened the Ghibeline party, which was already nearly undermined by the intrigues of the mendicant orders. The faithful Parma revolted; the triumph of the Ghibelines in Florence (1248) lasted only two years; and their second victory, after the battle of Monte Aperto (1260), gave them the ascendancy but six years. The Bolognese united all the cities of Italy in a Guelf league, and, in the battle of the Panaro (1249), took Enzius prisoner, whom they never released. In the Trevisan Mark alone, the Ghibelines possessed the supremacy, by means of Ezzelin, till he fell before a crusade of all the Guelfs against him (1255). But these contests were fatal to liberty; the house Della Scala followed that of Romano in the dominion, and Milan itself, with a great part of Lombardy, found masters in the house Della Torre. Tyrants every where arose; the maritime republics and the republic of Tuscany alone remained free.

Sixth Period.—From the Fall of the Hohenstaufen to the Formation of the modern States. In this period, different princes attempted to usurp the sovereignty of Italy.—1. *The Princes of Anjou.* After Charles I of Anjou had become, by the favor of the pope, king of Naples, senator of Rome, papal vicar in Tuscany, and had directed his ambition to the throne of Italy (a policy in which his successors persevered), the names of *Guelfs* and *Ghibelines* acquired a new signification. The former denoted the friends, the latter the enemies, of the French. To these factions were added, in the republics, the parties of the nobility and the people, the latter of which was almost universally victorious. The honest exertions of the noble Gregory X (who died 1276) to establish peace, were of no avail; those of Nicolas III, who feared the preponderance

of Charles, were more efficient; but Martin IV (1280), servilely devoted to Charles, destroyed every thing which had been effected, and persecuted the Ghibelines with new animosity. A different interest—that of trade and navigation—impelled the maritime republics to mutual wars. The Genoese assisted Michael Palæologus (1261) to recover Constantinople from the Venetians, and received in return Chios; at Meloria, they annihilated (1284) the navy of the Pisans, and completed their dominion of the sea by a victory over the Venetians at Curzola (1298). Florence rendered its democracy complete by the banishment of all the nobles (1282), and strengthened the Guelf party by wise measures; but a new schism, caused by the insignificant Pistoia, soon divided the Guelfs in Florence and all Tuscany into two factions—the Neri (Black) and Bianchi (White) (1300). The latter were almost all expelled by the intrigues of Boniface VIII, and joined the Ghibelines (1302). In Lombardy, freedom seemed to have expired, when the people, weary of the everlasting feuds of their tyrants, rose in most of the cities, and expelled them (1302–6), including the Visconti, who had supplanted the Della Torre (1277) in the government of Milan.—2. *The Germans and the Della Scala.* Henry VII, the first emperor who had appeared in Italy for 60 years (1310), restored the princes to their cities, and found general submission to his requisitions, peace among the parties, and homage to the empire. Florence alone undertook the glorious part which she so nobly sustained for two centuries, as the guardian of Italian freedom, chose Robert of Naples, the enemy of Henry, her protector for five years, and remained free while Italy swarmed with tyrants. The Ghibeline Pisa received a master after the death of Henry, in Ugucione della Faggiuola (1314). After his expulsion, Lucca, which he also ruled, received another lord in Castruccio Castracani (1316); Padua fell (1318) to the house of Carrara; Alexandria, Tortona (1315) and Cremona (1322) to the Visconti of Milan; Mantua (governed, since 1275, by the Bonacossi), devolved, by inheritance, to the Gonzagas (1328); in Ferrara, the long-contested dominion of the Este was established (1317); and Ravenna was governed, from 1273, by the Polenta. In the other cities, the same tyranny existed, but frequently changing from family to family, and therefore more oppressive. These petty princes, especially Della Scala, Matteo Visconti, and Castruccio, were a counter-

poise to the ambitious views of Robert of Naples, appointed by Clement V imperial vicar in Italy. Robert, however, acquired for his son, Charles of Calabria, the government of Florence and Sienna, which he retained till his death (1328). Louis of Bavaria, who came to Italy (1327) to reduce the Anjous and the Guelfs, became himself at variance with the Ghibelines, whom he alienated by his caprice and perfidy; and the character of John XXII so cooled the zeal of the Guelfs, that both parties, recognising the common interest of liberty, became somewhat more friendly. The amiable adventurer John, king of Bohemia, suddenly entered Italy (1330). Invited by the inhabitants of Brescia, favored by the pope, elected lord of Lucca, every where acting the part of a mediator and peacemaker, he would have succeeded in establishing the power at which he aimed, had he not been opposed by the Florentines. On his second expedition to Italy (1333), Azzo Visconti, Mastino della Scala, and Robert of Naples, united against him and his ally, the papal legate Bertrand of Poiet, who aspired to the dominion of Bologna. After the downfall of both (1334), when the Pepoli began to rule in Bologna, Mastino della Scala, master of half Lombardy and of Lucca, began to menace the freedom of Lombardy. Florence led the opposition against him, and excited a war of the league, in which it gained nothing but the security of its liberty. After the baffled Mastino had sold Lucca to the Florentines, the Pisans arose, and conquered it for themselves (1342). In Rome, torn by aristocrats, Cola Rienzi (1347) sought to restore order and tranquillity; he was appointed tribune of the people, but was forced, after seven months, to yield to the nobility. Having returned, after seven years of banishment, with the legate cardinal Albornoz (1354), he ruled again a short time, when he was murdered in an insurrection. The Genoese, tired of the perpetual disputes of the Ghibeline Spinolas and Dorias with the Guelf Grimaldi and Fieschi, banished all these families in 1339, and made Simon Boccanegra their first doge. In Pisa, the Ghibelines, the council of the captain-general, Ricciani della Gherardesca, separated into two new parties, Bergolini and Raspanti, of whom the former, under Andrea Gambacorti, expelled the latter (1348). About this time, Italy suffered by a terrible famine (1347) and a still more terrible pestilence (1348), which swept away two thirds of the population. No less terrible was the scourge of the *bande* (banditti), or

large companies of soldiers, who, after every peace, continued the war on their own account, ravaging the whole country with fire and sword; such as the bands of the count Werner (1348) and of Montreal (1354).—3. *The Visconti*. John Visconti, archbishop and lord of Milan, and his successors, were checked in their dangerous projects for extending their power, not so much by Charles IV's expedition through Italy, and by the exertions of innumerable papal legates, as by the wisdom and intrepidity of the republics, especially of the Florentine. Charles appeared in 1355, overthrew in Pisa the Gambacorti, elevating the Raspanti, destroyed in Sienna the dominion of the Nine, to which succeeded that of the Twelve, subjected for the moment all Tuscany, and compelled Florence itself to purchase the title of an imperial city. In 1363, he effected but little against the Visconti, freed Lucca from the Pisanese power, and overthrew the Twelve in Sienna; but his attacks on the liberty of Pisa and Sienna failed in consequence of the valor of the citizens. Pope Innocent VI succeeded in conquering the whole of the States of the Church by means of the cardinal legate Egidius Albornoz (1354—60); but, reduced to extremities by the oppressions of the legates, and encouraged by Florence, the enemy of all tyranny, the conquered cities revolted in 1375. The cruelties of cardinal Robert of Geneva (afterwards Clement VII), and of his band of soldiers from Bretagne, produced only a partial subjugation; and in the great schism, the freedom of these cities, or rather the power of their petty tyrants, was fully confirmed. The Visconti, meanwhile, persisting in their schemes of conquest, arrayed the whole strength of Italy in opposition to them, and caused the old factions of Guelfs and Ghibelines to be forgotten in the impending danger. Genoa submitted to John Visconti (1353), who had purchased Bologna from the Pepoli (1350); but his enterprise against Tuscany failed through the resistance of the confederated Tuscan republics. Another league against him was concluded by the Venetians (1354) with the petty tyrants of Lombardy. But the union of the Florentines with the Visconti against the papal legates (1375), continued but a short time. In Florence, the Guelfs were divided into the parties of the Ricci and the Albizzi. The sedition of the Ciompi (1378), to which this gave rise, was quelled by Michael di Lando, who had been elected gonfaloniere by themselves, in a way no less manly than disinterested. The Venetians, irri-

tated with Carrara on account of the assistance he had given the Genoese in the war at Chiozza (1379), looked quietly on while John Galeazzo Visconti deprived the Della Scala and Carrara of all their possessions (1387 and 1388), and Florence alone assisted the unfortunate princes. Francis Carrara made himself again master of Padua (1390), and maintained his advantages, till he sunk under the enmity of the Venetians (1406), who, changing their policy, became henceforth, instead of the opponents, the rivals of the ambitious views of the Visconti. John Galeazzo obtained from the emperor Wenceslaus the investiture of Milan as a duchy (1395), purchased Pisa (which his natural son Gabriel bargained away to Florence, 1405) from the tyrant Gerard of Appiano (who reserved only the principality of Piombino), and subjugated Sienna (1399), Perugia (1400) and Bologna (1402), so that Florence, fearfully menaced, alone stood against him in the cause of liberty. On his death (1402), the prospect brightened, and, during the minority of his sons, a great portion of his states was lost. When Ladislaus of Naples, taking advantage of the schism, made himself master of all the Ecclesiastical States, and threatened to conquer all Italy (1409), Florence again alone dared to resist him. But this danger was transitory; the Visconti soon rose up again in opposition. Duke Philip Maria reconquered all his states of Lombardy, by means of the great Carmagnola (1416—20). Genoa, also, which was sometimes given up, in nominal freedom, to stormy factions (of the Fregosi, Adorni, Montalto, Guarco), and at other times was subject to France (1396), or to the marquis of Montferrat (1411), submitted to him (1421). Florence subsequently entered into an alliance against him with the Venetians (1425); and by means of Carmagnola, who had now come over to them, they conquered the whole country as far as the Adda, and retained it in the peace of Ferrara (1428). In Perugia, the great condottiere Braccio da Montone, of the party of the Baglioni, succeeded in becoming master of this city and of all Umbria, and, for a period, even of Rome (1416). In Sienna, the Petrucci attained a permanent dominion (1430).

—4. *Balance of the Italian States.* After Milan had been enfeebled by the Venetians and Florentines, and while Alphonso of Arragon was constantly disturbed in Naples (see *Naples*) by the Anjou party, no dangerous predominance of power existed in Italy, though mutual jealousy still excited frequent wars, in which two

parties among the Italian mercenary soldiers, the Bracheschi (from Braccio da Montone) and the Sforzeschi (so called from Sforza Attendolo), continued always hostile to each other, contrary to the custom of those mercenary bands. After the extinction of the Visconti (1447), Francis Sforza succeeded in gaining possession of the Milanese state (1450). (See *Milan*.) The Venetians, who aimed at territorial aggrandizement, having formed a connexion with some princes against him, he found an ally in Florence, which, with a change of circumstances, wisely altered her policy. About this time, the family of the Medici attained to power in that city by their wealth and talent. (See *Medici*.) Milan (where the Sforza had established themselves), Venice (which possessed half of Lombardy), Florence (wisely managed by Lorenzo Medici), the States of the Church (for the most part restored to the holy see), and Naples (which was incapable of employing its forces in direct attacks on other states), constituted, in the 15th century, the political balance of Italy, which, during the manifold feuds of these states, permitted no one to become dangerous to the independence of the rest, till 1494, when Charles VIII of France entered Italy to conquer Naples, and Louis Moro Sforza played the part first of his ally, then of his enemy, while the pope, Alexander VI, eagerly sought the friendship of the French, to promote the exaltation of his son, Cæsar Borgia.—5. *Contest of foreign Powers for Provinces in Italy.* Charles VIII was compelled to evacuate Naples and all Italy; his successor, Louis XII, was also expelled, by Ferdinand the Catholic, from Naples (conquered in 1504). He was more successful against Milan, which, supported by hereditary claims, he subjected to himself in 1500. Cæsar Borgia's attempts to acquire the sovereignty of Italy were frustrated by the death of his father (1505); when the warlike pope, Julius II, completed the subjugation of the States of the Church, not, indeed, for a son or nephew, but in the name of the holy see. He concluded with Maximilian I, Ferdinand the Catholic, and Louis XII, the league of Cambray (1508) against the ambitious policy of the Venetians, who artfully succeeded in dissolving the league, which threatened them with destruction. The pope then formed a league with the Venetians themselves, Spain, and the Swiss, for the purpose of driving the French from Italy. This holy league (1509) did not, however, then attain its object, although Julius was little affected by the

French and German council held at Pisa to depose him. Max. Sforza, who had re-acquired Milan (1512), relinquished it without reserve to Francis I (1515); but the emperor Charles V assumed it as a reverted fief of the empire, and conferred it on Francesco Sforza, brother of Maximilian (1520). This was the cause of violent wars, in which the efforts of Francis were always unsuccessful. He was taken prisoner at Pavia (1525), and, with his other claims, was compelled to renounce those on Milan, which remained to Sforza, and, after his death (1540), was granted by Charles V to his son Philip. The Medicæan popes, Leo X (1513) and Clement VII (1523), were bent, for the most part, on the aggrandizement of their family. Charles V, to whom all Italy submitted after the battle of Pavia, frustrated, indeed, the attempts of Clement VII to weaken his power, and conquered and pillaged Rome (1527); but, being reconciled with the pope, he raised (1530) the Medici to princely authority. Florence, incensed at the foolish conduct of Pietro towards France, had banished the Medici, in 1494, but recalled them in 1512, and was now compelled to take a station among the principalities, under duke Alexander I de' Medici. Italian policy, of which Florence had hitherto been the soul, from this period, is destitute of a common spirit, and the history of Italy is therefore destitute of a central point.

Seventh Period.—Mutations of the Italian States down to the French Revolution. After the extinction of the male branch of the marquises of Montferrat, Charles V gave this country to the Gonzaga of Mantua (1536). Maximilian II subsequently (1573) raised Montferrat to a duchy. The Florentines failed (1537) in a new attempt to emancipate themselves after the murder of duke Alexander. Cosmo I succeeded him in the government, by the influence of Charles V. Parma and Piacenza, which Julius II had conquered for the papal see, Paul III erected into a duchy (1545), which he gave to his natural son, Peter Alois Farnese, whose son Ottavio obtained the imperial investiture in 1556. Genoa (see *Genoa*), subject to the French since 1499, found a deliverer in Andrew Doria (1528). He founded the aristocracy, and the conspiracy of Fiesco (1547) failed to subvert him. In 1553, besides Milan, Charles V conferred Naples also on his son Philip II. By the peace of Chateau-Cambresis (1559), Philip II and Henry II, of France, renounced all their claims to Piedmont, which was

restored to its rightful sovereign, duke Emanuel Philibert of Savoy, the brave Spanish general. The legitimate male line of the house of Este became extinct in 1597, when the illegitimate Cæsar of Este obtained Modena and Reggio from the empire, and Ferrara was confiscated as a reverted fief by the holy see. In the second half of the 16th century, the prosperity of Italy was increased by a long peace, as much as the loss of its commerce allowed.—Henry IV of France having, by the treaty of Lyons, ceded Saluzzo, the last French possession in Italy, to Savoy. The tranquillity continued till the contest for the succession of Mantua and Montferrat, after the extinction of the Gonzaga family (1627). Misfortunes in Germany compelled Ferdinand II to confer both countries (1631), as a fief on Charles of Nevers, the *protégé* of France, whose family remained in possession till the war of Spanish succession. In the peace of Chierasco (1631), Richelieu's diplomacy acquired also Pignerol and Casale—strong points of support, in case of new invasions of Italy, though he had to relinquish the latter (1637). By the extinction of the house Della Rovera, the duchy of Urbino, with which Julius II had invested it, devolved, in 1631, to the papal see. In the second half of the 17th century, the peace of Italy was not interrupted, excepting by the attempts of Louis XIV on Savoy and Piedmont, and appeared to be secured for a long time, by the treaty of neutrality at Turin (1696), when the war of Spanish succession broke out. Austria conquered Milan, Mantua and Montferrat (1706), retained the two first (Mantua was forfeited by the felony of the duke), and gave the latter to Savoy. In the peace of Utrecht (1714), Austria obtained, moreover, Sardinia and Naples; Savoy obtained Sicily, which it exchanged with Austria for Sardinia, from which it assumed the royal title. Mont Genievre was made the boundary between France and Italy. The house of Farnese becoming extinct in 1731, the Spanish Infant Charles obtained Parma and Piacenza. In the war for the Polish throne, of 1733, Charles Emmanuel of Savoy, in alliance with France and Spain, conquered the Milanese territory, and received therefrom, in the peace of Vienna (1738), Novara and Tortona. Charles, Infant of Spain, became king of the Two Sicilies, and ceded Parma and Piacenza to Austria. The Medici of Florence, entitled, since 1575, grand-dukes of Tuscany, became extinct in 1737. Francis Stephan, duke of Lorraine, now re-

ceived Tuscany by the preliminaries of Vienna, and, becoming emperor in 1745, made it the appanage of the younger line of the Austro-Lorraine house. In the war of Austrian succession, the Spaniards conquered Milan (1745), but were expelled thence by Charles Emmanuel, to whom Maria Theresa ceded, in reward, some Milanese districts, viz. all of Vigevanasco and Bobbio, and part of Anghiera and Pavese. Massa and Carrara fell to Modena, in 1743, by right of inheritance. The Spanish Infant, don Philip, conquered Parma and Piacenza in his own name, lost them, and obtained them again as a hereditary duchy, by the peace of Aix-la-Chapelle (1748). Thus, in the 18th century, the houses of Lorraine, Bourbon and Savoy possessed all Italy, with the exception of the ecclesiastical territories, Modena and the republics, which, like a superannuated man, beheld with apathy operations in which they had no share. A quiet of 40 years ushered in their downfall.

Eighth Period.—From the French Revolution to the present Time. In September, 1792, the French troops first penetrated into Savoy, and planted the tree of liberty. Though expelled for some time, in 1793, by the Piedmontese and Austrians, they held it at the end of the year. The national convention had already declared war against Naples, in February, 1793. In April, 1794, the French advanced into the Piedmontese and Genoese territories, but were expelled from Italy in July, 1795, by the Austrians, Sardinians and Neapolitans. In 1796, Napoleon Bonaparte received the chief command of the French army in Italy. He forced the king of Sardinia to conclude a treaty of peace, by which the latter was obliged to cede Nizza (Nice) and Savoy to France; conquered Austrian Lombardy, with the exception of Mantua; put the duke of Parma and the pope under contribution; and struck such consternation into the king of Naples, that he begged for peace. After Mantua had also fallen, in 1797, Bonaparte formed of Milan, Mantua, the portion of Parma north of the Po, and Modena, the Cisalpine republic. (See *Cisalpine Republic*.) France likewise made war on the pope, and annexed Bologna, Ferrara and Romagna to the Cisalpine republic (1797), by the peace of Tolentino. The French then advanced towards Rome, overthrew the ecclesiastical government, and erected a Roman republic (1798). In Genoa, Bonaparte occasioned a revolution, by which a democratic republic was formed after

the model of the French, under the name of the *Ligurian republic*. The French had, meanwhile, penetrated into Austria, through the Venetian territory. The Venetians now made common cause with the brave Tyrolese, who gained advantages over the French in their Alps. Bonaparte, therefore, occupied Venice without striking a blow, and gave the republic a democratic constitution; but, by the peace of Campo-Formio (17th Oct., 1797), the Venetian territory, as far as the Adige, was relinquished to Austria, and the rest incorporated with the Cisalpine republic. The king of Sardinia concluded a treaty of alliance and subsidy with France, October 25; but, in 1798, the directory, assailed in Rome from Naples, deemed it expedient to compel him to resign his territories on the main land. Notwithstanding its treaty of amity with France, Naples concluded an alliance, in 1798, with England and Russia. The French, therefore, occupied Naples, and erected there the Parthenopean republic. The grand-duke of Tuscany had likewise formed an alliance with Naples and England, and his country was, in return, compelled by the French to receive, like Piedmont, a military administration. After the congress of Rastadt (q. v.) was broken off, Austria and the German empire, under Russian support, renewed the war against the French, who again left Naples and Rome to the English, Russians and Turks. The king and the pope returned to their capitals in Lombardy; the French were defeated by the Austrians, under Kray and Melas, and by the Russians, under Suwarroff, and lost all their fortresses, except Genoa, where Massena sustained a vigorous siege, while his countrymen had to evacuate all Italy. But, in the meanwhile, Bonaparte was made first consul after his return from Egypt. (See *Egypt, Campaign of the French in.*) He marched with a new army to Italy, defeated the Austrians at the memorable battle of Marengo (1800), and compelled them to a capitulation, by which all the Italian fortresses were again evacuated. By the peace of Luneville (q. v.), Feb. 9, 1801, the possession of Venice was confirmed to Austria, which was to indemnify the duke of Modena, by the cession of Brisgau. The duke of Parma received Tuscany, and afterwards, from Bonaparte, the title of king of Etruria. Parma was united with France. The Cisalpine and Ligurian republics were guaranteed by Austria and France, and with the Ligurian territories were united the imperial fiefs

included within their limits. The king of Naples, who had occupied the States of the Church, was obliged to conclude peace at Florence (28th of March). By Russian mediation, he escaped with the cession of Piombino, the *Stato degli Presidj*, and his half of the island of Elba, together with the promise of closing his harbors against the English. The other half of Elba Tuscany had already relinquished to France. But the whole island was obstinately defended by the English and Corsicans, with the armed inhabitants, and not evacuated till autumn. The *Stato degli Presidj* France ceded to Etruria, September 19. Strong detachments of French troops remained both in Naples and Tuscany, and their support cost immense sums. To the republics of Genoa and Lucca the first consul gave new constitutions in 1801. But in January, 1802, the Cisalpine republic was transformed into the Italian republic, in imitation of the new French constitution, and Bonaparte became president. He appointed the citizen Melzi d'Erile vice-president. Genoa also received a new constitution, and Girolamo Durazzo for doge. Piedmont, however, was united with France. After Bonaparte had become emperor, in 1804, he attached (March 17, 1805) the royal crown of Italy to the new imperial crown; he promised, however, never to unite the new monarchy with France, and even to give it a king of its own. The new constitution was similar to that of the French empire. Napoleon founded the order of the iron crown, and, having placed the crown on his own head, at Milan, May 26, and Genoa having been united with France, May 25, he appointed his step-son, Eugene Beauharnais, viceroy of Italy, who labored with great zeal for the improvement of all branches of the government, of industry and the arts. Circumstances, however, rendered this new government oppressive, as the public expenses, during peace, amounted to 100,000,000 francs, which were all to be contributed by less than 4,000,000 people. No European power recognised, expressly, the Italian kingdom of Napoleon. The emperor continued to strengthen his power against the active enemies of the new order of things, and gave to his sister Eliza the principality of Piombino, and to her husband, Pasquale Bacciocchi, the republic of Lucca, as a principality, both as French fiefs. Parma, Piacenza and Guastalla were incorporated with the French empire, July 21st. The pope was obliged to sanction the imperial corona-

tion by his presence. Austria now acceded to the alliance of Russia and England against France. Naples, also, again suffered the English and Russians to land. But the success of the Austrian arms was frustrated by the defeats at Ulm and Austerlitz, after which the peace of Presburg (December 26th, 1805) completed the French supremacy in Italy. Austrian Venice, with Istria and Dalmatia, was united to the kingdom of Italy; and this, with all the French institutions, Italy recognised. The kingdom had now an extent of 35,450 square miles, with 5,657,000 inhabitants. Naples was evacuated by its auxiliaries, and occupied by the French, notwithstanding the attempts of the queen to excite a universal insurrection. March 31, Napoleon gave the crown of Naples to his brother Joseph. In vain did the prince of Hesse-Philippsthal defend the fortress Gaeta. In vain did an insurrection break out in Calabria, encouraged by the English, who, under general Stuart, defeated the French at Meida, July 4; and conquered several fortified places on the coast; but, after Gaeta had fallen (July 18), and Massena penetrated as far as Calabria, they reëmbarked. As the English, however, were masters of the sea, Sicily was secured to king Ferdinand. In 1808, the widow of the king of Etruria, who conducted the regency in behalf of her minor son, was deprived of her kingdom, which was united with France. Napoleon, moreover, appointed his brother-in-law, the prince Borghese, governor-general of the departments beyond the Alps, who took up his residence at Turin. As Napoleon had, meanwhile, given his brother Joseph the crown of Spain (who reluctantly left Naples, where he was much esteemed, as he had, within this short time, laid the foundation of the most essential improvements), he filled the throne of Naples with his brother-in-law Joachim Murat, until that period grand-duke of Berg, who entered Naples Sept. 6, 1808. In 1809, the emperor gave Tuscany to his sister Eliza, of Piombino, with the title of grand-duchess. In the same year, Austria made new exertions to break the excessive power of France; but Napoleon again drove her troops from the field, and appeared once more victorious in Vienna, where he proclaimed (May 17) the end of the secular authority of the popes (a measure of which his downfall has delayed the execution), and the union of the States of the Church with France. Rome became the second city of the empire, and a pension

of 2,000,000 of francs was assigned to the pope. After the peace of Vienna, by which Napoleon acquired the Illyrian provinces, Istria and Dalmatia were separated from the kingdom of Italy and attached to them. On the other hand, Bavaria ceded to Italy the circle of the Adige, a part of Eisach, and the jurisdiction of Clausen. The power of the French emperor was now, to all appearance, firmly established in Italy as in all Europe. While the Italian people were supporting French armies, sacrificing their own troops in the ambitious wars of Napoleon in remote regions, and were obliged to pay heavy taxes in the midst of the total ruin of their commerce, all the periodicals were full of praises of the institutions for the encouragement of science, arts and industry in Italy. After the fatal retreat from Russia, Murat, whom Napoleon had personally offended, deserted the cause of France, and joined Austria, Jan. 11, 1814, whose army penetrated into Italy, under Bellegarde. The viceroy, Eugene, continued true to Napoleon and his own character, and offered to the enemies of his dynasty the boldest resistance, which was frustrated by the fall of Napoleon in France. After the truce of April 21, 1814, the French troops evacuated all Italy, and most of the provinces were restored to their legitimate sovereigns. The wife of Napoleon, however, the empress Maria Louisa, obtained the duchies of Parma, Piacenza and Guastalla, with reversion to her son; and Napoleon himself became sovereign of Elba, of which he took possession May 4. But, before the congress of Vienna had organized the political relations of Europe, he effected his return to France, March 1, 1815. At the same time, the king of Naples, Murat (see *Murat*), abandoned his former ambiguous attitude, and took up arms, as he pretended, for the independence of Italy. But his appeal to the Italians, March 30, was answered by a declaration of war by Austria, April 12. Driven from Bologna by the Austrian forces, April 15, and totally defeated by Bianchi Tolentino, May 2 and 3, he lost the kingdom of Naples, into which the Austrian general Nugent had penetrated from Rome, and Bianchi from Aquila, seven weeks after the opening of the campaign. He embarked from Naples, with a view of escaping to France, May 19. Ferdinand IV returned from Palermo, and Murat's family found an asylum in Austria. Murat himself made a descent in Calabria, from Corsica, in order to re-

cover his lost kingdom. He was taken prisoner at Pizzo, brought before a court-martial, and shot, Oct. 13, 1815.* Meanwhile, the congress of Vienna, by the act of June 9, 1815, had arranged the affairs of Italy:—1. The king of Sardinia was reinstated in his territories, according to the boundaries of 1792, with some alterations on the side of Geneva; for the portion of Savoy, left in possession of France by the peace of Paris, of May 30, 1814, was restored by the treaty of Paris, of Nov. 20, 1815. To his states was united Genoa, as a duchy, according to the boundaries of that republic in 1792, and contrary to the promises made to Genoa.—2. The emperor of Austria united with his hereditary states the new Lombardo-Venetian kingdom, consisting of the Venetian provinces formerly belonging to Austria, the Valteline, Bormio and Chiavenna, separated from the Grisons, besides Mantua and Milan. Istria, however, was united with the Germanic-Austrian kingdom of Illyria; Dalmatia, with

*If the downfall of Napoleon is regretted in any quarter of the world, it is in Italy. This country, which, to the misfortune of Germany—that of being split into petty divisions, and convulsed by civil dissensions, for centuries—adds the further misfortune of obeying foreign princes, had become destitute of every element of national life. Its commerce was fettered by the numerous political divisions; its administration poisoned and vitiated to a degree of which none can have an idea, except an eye-witness; the cultivators of the ground impoverished by the heavy rents which they had to pay to the rich land-owners; science enslaved by the sway of the clergy; the noblemen, distrusted by the foreign governments, where they existed, and not admitted to offices of great importance, had lost energy and activity; in fact, hardly any thing could be said to flourish, with the exception of music, and, to a certain degree, other fine arts. Under Napoleon, every thing was changed. Italian armies were created, which gave birth to a sense of military honor among the people; and the organization of the judicial tribunals was improved, and justice much better administered; industry was awakened and encouraged; schools received new attention, and the sciences were concentrated in large and effective learned societies; in short, a new life was awakened, and no Italian or German, who wishes well to his country, can read without deep interest the passage in *Las Cases' Memorial*, in which Napoleon's views on these two countries are given. His prophecy, that Italy will one day be united, we hope will be fulfilled. Union has been the ardent wish of reflecting Italians for centuries, and the want of it is the great cause of the suffering of this beautiful but unfortunate country. A very interesting work, respecting the improvement of civil spirit in Italy, during the time of Napoleon, is *Lettres sur l'Italie*, by Lullin de Chateaueux. This work also contains much information respecting the agriculture of Italy, and many other subjects, of which the descriptions of this country hardly ever speak.

Ragusa and Cattaro, constituting a distinct Austrian kingdom.—3. The valley of the Po was adopted as the boundary between the States of the Church and Parma; otherwise, the boundaries of Jan. 1, 1792, were retained. The Austrian house of Este again received Modena, Reggio, Mirandola, Massa and Carrara.—4. The empress Maria Louisa received the state of Parma, as a sovereign duchess, but, by the treaty of Paris, of June 10, 1817, only for life, it being agreed that the duchess of Lucca and her descendants should inherit it. Lucca, in that case, falls to the Tuscan dynasty, which, in return, resigns its districts in Bohemia to the duke of Reichstadt.—5. The archduke Ferdinand of Austria became again grand-duke of Tuscany, to which were joined the *Stato degli Presidj*, the former Neapolitan part of the island of Elba, the principality of Piombino, and some small included districts, formerly fiefs of the German empire. The prince Buoncompagni Ludovisi retained all his rights of property in Elba and Piombino.—6. The Infanta, Maria Louisa, received Lucca, of which she took possession as a sovereign duchy, 1817, with an annuity of 500,000 francs, till the reversion of Parma.—7. The territories of the church were all restored, with the exception of the strip of land on the left bank of the Po; and Austria retained the right of maintaining garrisons in Ferrara and Comacchio.—8. Ferdinand IV was again recognised as king of the Two Sicilies. England retained Malta, and was declared the protectress of the United Ionian Islands. (See *Ionian Islands*.) The knights of Malta, who had recovered their possessions in the States of the Church and in the kingdom of the Two Sicilies (in Spain, 1815), for a time made Catania, and, after 1826, Ferrara, their residence. The republic of San Marino, and the prince of Monaco, whose mountain fortress the Sardinians, and, before them, the French, occupied, alone remained unharmed amid the 15 political revolutions which Italy had undergone in the course of 25 years. The Austrian predominance was thus more firmly established than ever in Italy. In its seas and on its coasts, the desire of union and independence was not extinguished among the people of Italy. Traces of a struggle for a united and liberal government were almost every where visible; and several of the governments, Naples, Rome and Turin, in particular, in vain endeavored to protect themselves against secret political societies (Unitari-

ans, Carbonari) and freemasonry by inquisitorial tribunals, Jesuits and secret police. The fate of this delightful country has employed, during the last seven years, the cabinets of the first powers of Europe, according to the system of modern policy founded by the holy alliance, and more precisely defined by the congress of Aix-la-Chapelle (1818). While the spirit of Carbonarism (see *Carbonari*), excited by the Spanish revolution of January 1, 1820, and having for its object the union of Italy under one government, and its independence of foreign powers, particularly of Austria, threatened to subvert the political institutions of the peninsula in general, and of the single states in particular, and in some places, especially in Naples, Sicily and Piedmont, actually shook them, by rousing the troops to revolt, and by exciting popular commotions—the cabinets labored with equal zeal to maintain the principle of stability by the suppression of every revolution, and by opposing to the popular spirit the power of the police. Thus was a question, fraught with the most momentous consequences for all Europe, practically decided in Italy, viz. whether one state is entitled to interfere in the internal affairs of another, and overthrow, by force of arms, any new constitution which militates against the absolute monarchical principle. This principle, which was proclaimed unconditionally by the leading states of the continent, and by Great Britain under the supposition of particular circumstances threatening imminent danger to the neighboring state (see lord Castlereagh's declaration of the 19th January, 1821), resulted in Austria (as the nearest interested power, which had prevented the introduction of the representative system into Italy in 1815) restoring by force of arms the ancient prerogatives of the royal authority in Naples, Sicily and Piedmont, after obtaining the assent of the other four leading powers, which had been closely allied since 1818, and also of the Italian sovereigns, who participated, at the congress of Laybach, in the discussions respecting the affairs of Italy. Thus this power not only secured its own Italian provinces from the operation of liberal principles, but established its position as the guardian of the principle of stability and absolute monarchy in Italy. All this was effected by a war of four days with the revolutionary army of the Carbonari of Naples (7th–10th March, 1821), and by a war of three days with the federal party of Piedmont (7th–9th of April, 1821); so that Russia had no occa-

sion to permit its army of 100,000 men, already put in motion, to advance against the Italian nations. (For the history of those military revolutions, see *Naples*, and *Piedmont*. Respecting the congress of monarchs and ministers held at Troppau, from October to December, 1820; at Laybach; from January to the 13th May, 1821; and the congress, as splendid as it was numerous, held at Verona, from October to the 14th December, 1822, where the question of armed interference in the internal affairs of states, in reference to Italy and Spain, was discussed, and decided against the claims of the popular party, though, in Verona, without the acquiescence of England, see *Congress, Intervention, and Holy Alliance*.) In the congress of Verona the Porte had no share, because it did not recognise the right of interfering in its internal affairs (with reference to the Greeks). Even the deputies of the provisional government of Greece (see *Greece, Revolution of*) were not admitted at Verona; the pope, however, opened an asylum to the Greeks in general in Ancona, and suffered the letter of count Metaxa to be published, in which he solicited the mediation of the holy father in behalf of the affairs of Greece at the congress of Verona. The affairs of Italy were discussed in the last sessions of the congress. The plenipotentiaries of the Italian states were as follows, and voted in the following order:—Rome, the cardinal Spina, and Leardi, the nuncio at the court of Vienna (who died 1823); Naples, the prince Alvaro Ruffo, minister of foreign affairs, and the marquis Ruffo, private secretary of king Ferdinand; Sardinia, the count Della Torre, minister of foreign affairs, and the count Pralorme, Sardinian minister to the court of Vienna; Tuscany, the minister, prince Veri-Corsini; Parma, the count Magarly, minister of state; Lucca, the minister Mausi, and count Guicciardini. The petitions of the Maltese order for their restoration as a sovereign power were submitted by the commander, Antonio Busco; nothing, however, was decided on the subject, and the loan which the order subsequently attempted to negotiate in London, in 1823, had as little success as the negotiation with the Greek senate for the cession of an island. The political maxims which the monarchs followed at these congresses, with respect to Italy, were laid before the world, in the Circular Note of Verona of December 14, 1822. After the dissolution of the congress of Verona, the king of Naples followed the emperor of Austria to Vienna, where he remained till Ju-

ly, 1823, and then returned to his states,—his various oaths taken to support a constitutional form of government having been all violated. The efforts of the most intelligent Italians, from the time of Macchiavelli and Cæsar Borgia, son of pope Alexander VI (see *Alexander VI*), to restore the political unity of their native country, have given rise to the numerous secret political societies in Italy, which in Bologna were called the *Guelfi*; in the Roman and Neapolitan states, the *Patriotti Europei*, and *Carbonari*; in Upper Italy, the *Spilla nera*; in Piedmont and Lombardy, the *Filadelfi* and *Federati*. In Milan, the *Adelfia*, or the *Società de' sublimi maestri perfetti*, labored to produce a general outbreak of insurrections in Italy, in order to surround the Austrian army on its advance against Naples. Even the advocates of the illiberal system, or the *theocratic faction*, as it was termed, which likewise pursued its objects in secret societies, took advantage of the national desire of greater unity in Italy. It was therefore natural that the idea of connecting the Italian states in a political system similar to the Germanic confederation should have been agitated by the statesmen of the congress; but it seems to have been entirely given up, and Italy was left in the hands of Austria. On the other hand, measures were adopted, by all the Italian states, to extirpate the liberal spirit which, propagating itself under a perpetual variety of new forms (for example, in the sect of the *Ordoni di Napoli*, of the *Descamisados*, of the *Barabisti*, in Naples and the rest of Italy), had not ceased in the year 1825, in the June of which year a conspiracy was detected at Rome, to pursue its ancient object of uniting all the Italian states into one confederacy as a republic or constitutional monarchy, and freeing them from foreign influence. This display of revolutionary spirit is nothing new in the history of Italy. The middle ages, that golden period of absolute power, exhibit there an almost uninterrupted series of such political conspiracies, republican schemes and destructive convulsions, because Italy has never yet been permitted to be politically a nation, and to adopt a form required by its wants and its rights. One leading measure was, to occupy for some years the kingdom of the Two Sicilies and Piedmont (in which the old troops were disbanded), at the expense of these states, with Austrian armies, which had restored the former state of things. This was done conformably with the treaties between Austria and king Ferdinand, of October 18, 1821, and the king of

Sardinia, Charles Felix, at Novara, July 24, 1821. But, in compliance with the decrees of Verona (December 14, 1822), the Austrian troops, 12,000 in number, were gradually removed from Piedmont in 1823, and the fortress of Alexandria was surrendered, September 30, 1823, to Sardinian troops. In the same year, after a new Neapolitan army had been organized in Naples, the Austrian garrison, of 42,000 men, was diminished about 17,000, and, in Sicily, only the citadel of Palermo continued to be occupied by Austrian troops. The last detachment left the kingdom in 1827. The influence of Austria on the internal administration was likewise every where felt. The police of each state adopted the strictest measures for maintaining internal tranquillity. Secret societies were strictly prohibited (for example, in the Austrian Italian states, by a proclamation of August 29, 1820); tribunals were erected, and, in Naples, supported by movable columns, to punish the authors of revolutions; executions, proscription and banishment ensued. Some condemned Neapolitans and Lombards were carried to the Austrian fortresses of Spielberg and Munkatsch. The Neapolitan government proceeded with the utmost rigor against political criminals, as did also the Sardinian and Modenese. Both Naples and Sardinia, nevertheless, issued decrees of amnesty, from which only the authors and leaders of the insurrection were excluded. Notwithstanding this severity, political offences were so numerous, that, in Naples, in January, 1824, a more summary form of judicial proceeding was prescribed to the criminal courts. This was the fourth time, since 1821, that the government had been compelled, on account of the crowded state of the prisons, to have recourse to extraordinary expedients. The Lombardo-Venetian kingdom, Lucca, Parma, Tuscany and the church displayed the same anxiety in relation to secret associations. In Venice, the court of justice condemned 32, and in Milan 16 persons to death; but the emperor, in 1823, and January, 1824, transmuted the sentence into that of perpetual or temporary imprisonment. In September, 1821, the pope excommunicated the sect of the Carbonari and all similar associations, as branches of the long-prohibited freemasons; but in the Roman state, Tuscany, Parma and Lucca, no punishments were inflicted for participation in former political societies. In general, the papal government, under the direction of the cardinal Gonsalvi, was distinguished from the

others for conciliatory measures, and for moderation in establishing internal tranquillity. The influence of the apostolic see on the states convulsed by revolutions was thus, in some degree, increased. The press, universities and schools were, in particular, closely watched. In the kingdom of the Two Sicilies, and in Piedmont, strict measures were taken for the purification and discipline of the literary institutions; the Jesuits were restored, and rendered influential in the education of youth, by having committed to them, at Rome and other places, the schools, colleges and oratories, which they had before conducted. On the other hand, numerous banditti disturbed the public security, especially in Naples and the States of the Church. One of them got in their power (January, 1822) an Austrian colonel, for whose liberation they had the audacity to demand 40,000 Roman dollars; but they released him on seeing themselves surrounded by Austrian troops. In January, 1824, according to the *Diario di Roma*, a numerous band of roving youths was discovered in Italy, who had run away from their parents, organized themselves into companies, and subsisted by frauds and robbery. Among the single events, important for the history of Italy in late times, we must mention the death of pope Pius VII, in consequence of fracturing his leg, August 20, 1823. After a short conclave (from 3d to 27th September), he was succeeded by cardinal Annibal della Genga, born in 1760, at the family castle of the same name, near Spoleto, a prelate distinguished for his diplomatic services; he assumed the name of Leo XII, Sept. 27, 1823.* In the year 1825, Leo caused a jubilee to be celebrated in the States of the Church. (See *Jubilee*.) The friend and secretary of Pius VII, the statesman cardinal Gonsalvi, who effected great changes in the system of internal administration, died at Rome, Jan. 24, 1824. He had bestowed the presents received from the European sovereigns (upwards of 100,000 scudi in value), on the college *de propaganda fide*, of which he was the last prefect; and a great sum of money for rebuilding St. Paul's church, burned in Rome, in 1823. A somewhat milder spirit prevailed in the Two Sicilies, after the accession of Francis I (Jan. 4,

* Leo XII died Feb. 10, 1829, and cardinal Castiglione was elected pope, March 31. He took the name of Pius VIII, and died in December, 1830: Early in 1831, cardinal Cappellari was elected pope, and assumed the name of Gregory XVI.

1825).—Italy depends almost solely on its agriculture for subsistence; the sources from which it formerly drew its support, the arts, manufactures and commerce, being almost dried up. Commerce with foreign countries, which, in Naples especially, is altogether stagnant, is, for the most part, in the hands of foreigners, and, in a great measure, dependent on the British; thence the universal want of specie, the financial embarrassments of the governments, and the loans negotiated with Rothschild. Italy no longer lives, as formerly, on her cities, but on her soil. And even this source of prosperity maintains but a feeble existence, while taxes and tariffs impede the exportation of the staple productions to foreign countries, or bands of banditti and the want of good roads obstruct internal intercourse, as in Sicily and Calabria. The natural advantages of Italy entitle her to the highest rank in agriculture, commerce and the arts; but all branches of industry groan under political oppression. The government and people look on each other with jealousy and hate, and the ecclesiastical establishment poisons the springs of national activity. A political excitement is continually kept up by means of secret societies, which are found also in Spain and Switzerland, under different appellations—*Consistoriales*, *Croccignati*, *Crocciferi*, *Società della Santa Fede*, *Società del Anello*, and of the *Bruti*. The noted count Le Maistre was, for a long time, in Piedmont, the head of these malcontents, who sought to accomplish desperate, ambitious plans, while apparently zealous in the cause of religion or morality. Even the Calderari, in Naples, whose head was the ex-minister of the police of Naples, prince Canosa, have become one with the Sanfedists, who were connected with the *gouvernement occulte* (as it was denominated) of France. These ultras hate even Austria, because it seems to act with too great moderation. The grand-duke of Tuscany is a man of lenient principles, and, in that country, not a single Tuscan has been brought to account for political transgressions. Like the rest of Europe, Italy is on the eve of momentous events; but the convulsions in that country will be more violent than in many others, in consequence of its having to struggle at once for unity and independence, against a deeply rooted and obnoxious ecclesiastical establishment, the ignorance of a vast number of the people, and powerful enemies.—For the general history of Italy, previous to the last period, see Mura-

tori's invaluable works: *Annali d'Italia* (12 vols. 4to.); *Rerum Italicarum Scriptores*, (28 vls. fol.); and Sismondi's *Histoire des Républiques Italiennes* (3d edit., 16 vols. 1825). A continuation of Guicciardini's *Storia d'Italia*, until 1789, by C. Botta, has lately been announced. Percival's History of Italy, (2 vols.), contains a shorter view of the modern history of that country. For further information on the modern history and the statistics of Italy, see Carlo Botta's *Storia d'Italia dal 1789 al 1814* (Paris, 1824, 4 vols. 4to., and in French 5 vols.); the *Annali d'Italia dal 1750* (continuation of Muratori), *compilati dal Abbate A. Coppi* (3 vols., Rome, 1825); Bossi's *Storia d'Italia antica e moderna*; and the *Mémoires sur la Cour du Prince Eugène, et sur le Royaume d'Italie, pendant la Domination de Napoléon, &c.* (Paris, 1824); also, Leo's *Geschichte der Italienischen Staaten* (4th vol., Hamburg, 1830), and the historical works which are mentioned in the subsequent article on *Italian Literature*; also, the above-mentioned work of Lullin de Chateaufieux (*Letters on Italy*). This author investigates the causes of the decline of Italy, and describes regions which are not visited by most travellers. His comparison of the Italian system of agriculture with the English is interesting.*

Italian Language. The boundaries of the Italian language cannot be given with precision. In the north, towards Switzerland, Tyrol and the other neighboring countries, the valleys in which German, Italian, and dialects of the ancient Roman language, are spoken, alternate with each other. Even the sea is not a definite limit. On account of the early extension of the Italians over the islands of the Mediterranean, including those of Greece and the coasts of the Grecian main land, it is not easy to determine where the last Italian sound is heard. It is spoken, more or less corrupted, in all the ports of the Mediterranean, Christian and Turkish. Of late, however, the Italian language has lost ground on many islands, as, for in-

* The latest accounts from Europe, at the time we are writing (April 18, 1831), state that the Austrians had been victorious against the Italian insurgents, after a long battle; that the provisory government had retired from Bologna to the Mark of Ancona; and that the president of the new French cabinet had declared, that for France to prevent other powers from *interference* in the affairs of Italy, would be *interfering* herself, and against her principle; so that, if the elements of commotion in Europe do not produce a general war, the Italians will be crushed, and more severely enthralled than ever.

stance, on the Ionian islands. (q. v.) The origin of this beautiful and most harmonious tongue, is also lost in obscurity. The general opinion, that the Italian originated from a mixture of the classical Latin with the languages of the barbarians who overran Italy, is erroneous. The Roman literary language, which the scholar learns from Horace and Cicero, was not the dialect of the common people. That the former could not have been corrupted by the mixture of the barbarous languages, is proved by the fact, that Latin was written in the beginning of the middle ages, long before the revival of learning, with a surprising purity, considering the circumstances. After the language of common life had been entirely changed by the invasion of the northern tribes, in its whole spirit rather than by the mere admixture of foreign words (a consequence of the change of the spirit of the people), then a new language of literature was formed, though the classical Roman still continued to be used. The new language was opposed to the variety of dialects which had grown out of common life; the formation of it, however, was slow, because the learned and the poets, from whom it was necessarily to receive its stamp and development, despised it as an intruder on the Latin, which was venerable as well by its age, and the treasures handed down in it, as on account of the recollections of former greatness, with which the suffering Italians were fond of flattering themselves. Even down to the present day, that idiom, the melody of which carries us away in the most unimportant author, is not to be found as the common idiom of the people in any part of Italy.* It is a mistake to suppose that Boccaccio's language is to be heard from the lips of Tuscan peasant girls or Florentine porters. Even the Tuscan and Florentine dialect differs from the pure language of literature, which, during the first centuries of Italian literature, is found purer in the poets of Sicily and Naples than in the contemporary writers of Tuscany. The circumstance, that the most distinguished Italian poets and prose writers were born in Florence, and the

* The sweetness of this tongue, which often gives to a passage a charm independent of the meaning of the words, and resembling that of music, is, in our opinion, no where so apparent as in Tasso's *Jerusalem Delivered*, and many stanzas have struck us as attracting the hearer irresistibly, though some of them have no particular charm in the meaning of the words. This also gives the Italian improvisator a great advantage over one who attempts a similar performance in another language, in which he is entirely thrown upon the meaning of what he says.

authority assumed by later Tuscan academies, particularly the *Crusca* (q. v.), are the causes why the Tuscan dialect, in spite of its rough gutturals, which are intolerable to the other Italians,* became predominant in the language of literature. Dante, the creator, as it were, of Italian prose and poetry, and whose works are full of peculiarities of different dialects, distinctly maintains, in a treatise *De vulgari Eloquentia*, that it is inadmissible to attempt to raise a dialect to a literary language. Dante, indeed, distinguishes in the *lingua volgare* (so the language was called, which originated after the invasion of the barbarians) a *volgare illustre, cardinale, arlicum, curiale*; but this sufficiently proves that he held the opinion above stated. Fernow (in his *Rom. Studies*, Book viii., No. 11) mentions 15 chief dialects, of which the Tuscan has six subdivisions. Those dialects, in which no literary productions exist, are not enumerated. The Italian, as we find it at present, in literature and with the well educated, is essentially a Latin dialect. Its stock is Latin, changed, to be sure, in its grammar and construction, by the infusion of the modern spirit into the antique, as the character of the people underwent the same change. A number of Latin forms of words, which, even in the time of the Romans, existed in common language (as, for instance, *o* instead of *um*, at the end of a word), have been, by the course of time and revolutions in literature, elevated to a grammatical rank; and the same is very probably true of forms of phraseology. In many instances, the Italian exhibits changes in the Latin forms, which have evidently taken place in the same way, in which common people, in our days, corrupt the correct modes of speech by a rapid, or slurred, or mistaken pronunciation. This is partly the reason why the Italian has changed so considerably the proportion of the consonants to the vowels in Latin (from 1, 2 : 1, the Latin proportion, to 1, 1 : 1, the Italian proportion†); and this is one of the chief reasons of the great and uniform harmony in the Italian language. A careful investigation will show that, in fact, little admixture of Teutonic words took place, but that it is much more the Teutonic, or modern spirit, which changed the language so considerably.‡ The study of

* The beau-ideal of Italian is set forth in the saying, *Lingua Toscana in bocca Romana* (the Tuscan dialect in a Roman mouth).

† See the article *Consonant*.

‡ This change is also manifest in the difference between authors who wrote before the great revival of letters, and still later, before the French

Italian has been carried on, in modern times, with great zeal, and a recurrence to the old writers has much diminished the influence of the French models, so general after the time of Algarotti. The principles, according to which purity is now judged, have been clearly laid down by count Julius Perticari, son-in-law to Monti, in the work *Amor Patrio di Dante* (Milan, 1820), which powerfully opposes the presumption of the Tuscans in claiming to be in possession of the only good Italian. This work was considered, for a long time, the production of Monti, who, by his *Proposta di alcune Correzioni ed Aggiunte al Vocabolario della Crusca*, gave sufficient reason for such conjecture. To render the nobler language also the common property of the provinces to which it had hitherto remained foreign, was the aim of Gherardini's *Introduzione* (Milan, 1815). More was promised by the *Vocabolario della Lingua Italiana*, publishing at Bologna, the authors of which are arbitrary in the explanation and application of words. Bonavilla's *Vocabolario Etimologico* (Milan, 5 vols., 1825) hardly excited the attention of the Milanese, under whose eyes it originated. Romani's *Teoria e Dizionario gen. de Simoni* (Milan, 1825) seems to be more useful. Respecting the history of the Italian language, we may expect much from the profound researches of Benci. The philological treasures of a nation, in which the ancient writers are studied with so much zeal, and which is so extensively connected with foreign countries, must be continually augmenting. Wherever a line of Tasso has been found unprinted, wherever the pen of Guarini has been traced, the fragment has been published with a pious devotion, most probably not desired by the authors. Nevertheless, many interesting additions to the literature of Italy have been made in this way: thus, for instance, a work of Peter Perugino (*Di uno Scritto Autografo del Pittore P. Perugino nell' Archivio dell' Acad. di B. Arti di Perugia, &c.*, Perugia, 1820), poems of Bojardo (*Poesie di Matteo Maria Bojardo, Conte di Scandiano ecc. scelte ed illustrate del Caval. Venturi*, Modena, 1820), poems of Lorenzo the Magnificent (*Poesie del magnifico Lorenzo de' Medici*, Florence, 1820), poems of Luigi Alemanni (Florence, 1819), a work of Montecuculi, unknown till it

influence had taken place. This may, perhaps, account for the difficulty which an Italian reader finds in understanding many passages of Dante, which do not strike a German as particularly obscure.

was published by Grassi (Turin, 1820), and letters of Galilei, published by Venturi (Modena, 1821, 16mo. 2 vols.). Still greater has been the demand for editions of the acknowledged classics. Dante has been published in all shapes and sizes. Among these editions, that of *De Romani* (Rome, 1820, 4to.), the edition of Biagioli (Milan, 1820), and one published at Rovereta, in the Rhetian Alps, by an admirer of the poet, Aloisio Fantoni (1820), of which a manuscript in the hand-writing of Boccaccio was made the basis, deserve mention. The edition printed from the Bartolinian manuscript (Vienna, 1823) has acquired some distinction among the most recent, as have likewise Scolari's explanations (*Della piena e giusta Intelligenza di Dante*, Padua, 1822). Ugo Foscolo had prepared an edition, accompanied with notes and commentaries, which is now (1831) in course of publication at London. Similar attention has been paid to Petrarca, in the famous edition of Marsand (Padua, 1819, 4to.), and several editions for common use. Ariosto's *Orlando Furioso* has met with equal homage; the edition at Florence, by Molini (1821 and 1822, 5 vols.), unites every thing which is required for the understanding of the poet. No less care was bestowed on Torquato Tasso in the edition made by the typographical society (Milan, 1823 et seq.), and hardly an Italian author of note can be mentioned whose works have not been carefully edited. The *Società Tipografica de' Classici Italiani* even undertook the reprint of Muratori's *Annali d'Italia* (Milan, 1820 et seq., 20 large volumes), trusting to the zeal for collecting among travelling foreigners, and in so doing were more fortunate than the editor of the *Famiglie celebri Italiane*, which, with all its undisputed merit, has had but a heavy sale. Since the death of Morelli, the spirit of criticism, as regards the classics, seems to have died. The best Italian and English dictionary is that of Petronj, (Italian, French and English, 3 vols., London): Alberti (Italian and French) is very valuable. The best modern grammars are the *Grammaire des Grammaires Italiennes*, Biagioli's *Grammaire Italienne*.

Italian Literature and Learning (excluding poetry). One consequence of the irruption of the barbarians into Italy was a period of darkness and ignorance, as well as of disorder and distraction, from whose chaotic confusion the germs of a new civilization could only be developed slowly and laboriously.

First Period.—From Charlemagne to the

Death of Otho III, 1002.—The influence of Charlemagne as the friend of letters and the restorer of peace was favorable. We find an Italian, Petrus, deacon of Pisa, mentioned as his teacher in grammar. No less deserving of mention is Lothaire, who was king of Italy in 823, and founded the first public schools in many cities. Of the instructors in these schools, we know only Dungalus of Pisa, of whom, while he was still a monk at Bobbio, Charlemagne requested an explanation of two solar eclipses, and under whose name several works are still extant. Lothaire's example was imitated by pope Eugene II, in the States of the Church. The consequences, however, of these institutions, although valuable in themselves, were unimportant; for competent teachers were wanting, and the later Carolingians and popes suffered the new institutions of learning to fall to decay. In addition to this, the incursions of the Saracens and Hungarians into Italy, and the civil wars, had a very injurious influence. There were few individuals, in this dark period, celebrated for learning. In theology were distinguished the popes Adrian I, the above-mentioned Eugene II, Leo V, Nicolas I, and Sylvester II; Paulinus, patriarch of Aquileia (his works were published, Venice, 1737), Theodolphus, bishop of Orleans (his works, Paris, 1646), both contemporaries of Charlemagne; the two archbishops of Milan, Petrus and Albertus; Maxentius, patriarch of Aquileia; and, finally, the two abbots of Monte Casino, Autpertus and Bertarius. Among the historians of this time, whose writings contain valuable information, though in a rude and barbarous style, the principal are Paulus Warnefried, surnamed *Diaconus*, author of several works, especially of a history of the Lombards, and Erchempertus, with two unknown persons of Salerno and Benevento, who continued the above work; a priest of Ravenna, by name Agnellus (also Andreas), who wrote a history of the bishops of Ravenna; Andrew of Bergamo, author of a chronicle of Italy from 868 to 875; Anastasius, librarian of the Roman church, known by his lives of the Roman bishops, and Luitprandrus of Pavia, author of a history of his own times.

Second Period.—From the Death of Otho III, 1002, to the Peace of Constance, 1183. In this period, also, the condition of Italy was unfavorable to the interests of learning. The Italian cities were contending for their freedom with the emperors, and the conflict between the spiritual and

secular power was no less injurious. The crusades, which began at the close of the 11th century, salutary as they were in their ultimate influence, contributed, in their immediate results, to augment the general confusion. Of the popes, the ambitious Gregory VII and Alexander III took measures for improving the schools. The copies of ancient classic works were multiplied, and individuals took pains to collect books. Among the learned theologians of this period, we must mention Fulbert, bishop of Chartres, a native Roman; the two famous archbishops of Canterbury, Lanfranc and his scholar Anselm; Petrus Lombardus, teacher of theology at Paris, most famous for his four books *Sententiarum*; Petrus Damianus; the cardinal Albericus; Bruno, bishop of Segni; Anselmus, bishop of Lucca; Petrus Grossolanus, or Chrysolautus, archbishop of Milan, and Bonizone, bishop of Sutri, afterwards of Piacenza. All have left works, on which we shall not dwell. In philosophy, or rather dialectics, besides Lanfranc and Anselm, were distinguished Gerardus of Cremona, who taught at Toledo, and, among other things, translated, from the Arabic into Latin, the works of Avicenna and the *Almagest* of Ptolemy, and Johannes, the Italian, who expounded Plato and Aristotle at Constantinople, and gave instruction in logic. Music underwent an entire transformation through Guido of Arezzo. The medical art flourished in the school at Salerno, at the end of the 10th century. The physicians there seem to have first studied the works of the Arabians. The oldest monument of the Salernian school consists of certain dietetical rules, composed in Leonine verses, entitled *Medicina Salernitana*, or *De Conservanda Bona Valetudine*. Several physicians, both of Salerno and the neighborhood, were distinguished in these times for their works, viz. Matthæus Platearius, Saladinus of Ascoli (the last for his compendium of aromatic medicines), and several monks, whom we pass over. Jurisprudence revived with the freedom of the cities, and became a subject of general study. Throughout Italy there were schools in which it was taught; namely, at Modena, Mantua, Padua, Pisa, Piacenza, Milan, and above all at Bologna, where Imerius, who acquired for this city the appellation of *learned*, taught and explained the Roman law, and brought to light the concealed treasures of the Pandects. We might mention many distinguished lawyers of this period, but content ourselves with cit-

ing the famous Gratian, who first digested the canon law (in his *Decretum sive Concordia Canonum Discordantium*), for the use of the tribunals, and is to be regarded as the founder of the canon law. Although the grossest barbarism prevailed in every thing that related to taste, there were, nevertheless, individuals who paved the way to a knowledge of the ancients, by the study of the Greek and Latin languages, and sought to imitate their style. Among them was Papias, one of the first who compiled a Latin dictionary. The 11th and 12th centuries exhibit many scholars, whose works are destitute of elegance, but written in a clear and intelligible style. Such are Arnolphus, the two Landolphuses, Sire Raul, Otho Morena and his son Acerbus, Godofredus Malaterra, and several writers of chronicles, and authors of monastic histories, respecting whose names and works we refer the inquirer to Muratori's invaluable collection.

Third Period.—From the Peace of Constance, 1183, to the End of the 13th Century. In this period, the literature of Italy assumes a more pleasing aspect. Hitherto all works had been written in barbarous Latin, but attempts now began to be made in the language (rude, indeed, as yet) of the people (*lingua volgare*). Poetry, as usual, preceded prose. Dialectics and philosophy were improved, and as the sciences gained in solidity and extent, their mutual connexion became more apparent. The crusades had led to new sources of knowledge, and gave, in general, a new impulse to the mind. Notwithstanding the internal wars of Italy, letters flourished; for princes and republics vied with each other in encouraging scholars, and in founding new schools and institutions of education. The emperors Frederic I and II effected great improvements. The former promoted the study of jurisprudence in particular, and founded schools; the latter was himself a scholar, possessed an extensive knowledge of the languages, and established public schools throughout the south of Italy. His court, and that of his son Manfred, in Palermo, were thronged with the learned. Besides some poems in Italian, he also wrote a work on the natural history of birds. His learned chancellor, Pietro delle Vigne (Petrus de Vineis), was animated by the same spirit, and not less familiar with the science of law than with the conduct of political affairs. Besides six books of letters, his collection of Sicilian laws is still extant. Several of the popes were pro-

found scholars, and distinguished as authors, particularly Innocent III and IV, and Urban IV. The university of Bologna, at the beginning of the 13th century, contained 13,000 students from all countries of Europe; and Padua, Arezzo, Vicenza, Naples, &c., competed with it. The chief theologians of this period were Thomas Aquinas, the Franciscan Bonaventura, and Egidio Colonna, all three authors of numerous works. In philosophy, a new epoch began in Italy in this period, when the writings of Aristotle became known to the Italians, though in a somewhat corrupt state. Thomas Aquinas wrote a commentary on them by the command of the pope, and translated them, partly from the Greek, partly from the Arabic. Brunetto Latini produced an epitome of the Ethics of Aristotle, in his *Tesoro*, which was originally written in French, and is remarkable as an encyclopædia of the knowledge of the age. Mathematics and astronomy, in connexion with astrology, were cultivated. Campano, the most learned geometer and astronomer of his time, wrote a commentary on Euclid. After him we may name Lanfranco, Leonardo of Pistoia, and Guido Bonatti, the chief astrologer of the time. From this period dates the invention of spectacles and of the magnetic needle. The school of Salerno was the central point of medical study. It had able teachers in Pietro Musandino, Matteo Plateario, Mauro, &c.; but there were also distinguished physicians out of Salerno, such as Ugo of Lucca, the Florentine Taddeo (who wrote commentaries on the Aphorisms of Hippocrates, and on some works of Galen), Simon of Genoa (author of the *Clavis Sanitatis*, which may be regarded as the first medical and botanical dictionary), and others. Surgery made still greater progress under such men as Ruggieri of Parma (who wrote a *Practica Medicinæ*), and his countryman and contemporary Rolando (author of a Surgery, on which four of the principal physicians of Salerno wrote commentaries), Bruno, Teodorico, Guglielmo of Saliceto, and Lanfranco, of whom we have likewise treatises on surgery; but no science was more zealously or successfully pursued in the 13th century than jurisprudence. In Ferrara, Modena, Milan, Verona, and other Lombard cities, codes were compiled, on which a Dominican, who passed for a performer of miracles, John of Vicenza, bestowed a sort of consecration. The first lawyers of this time were Azzo of Bologna (whose *Summæ* on the institu-

tions and *Apparatus ad Codicem* have been printed), Ugolino del Prete, also a Bolognese (who incorporated with the *corpus juris* the feudal laws, compiled by Anselmus of Orto, and the decrees of the modern emperors), Accorso, a Florentine (who obtained the surname of *Glossator*, from his having collected the best glosses of his predecessors, and annexed others of his own), Odofredo (author of a commentary on the *Codex* and the digests), &c. In the canon law, Gratian's collection had been hitherto held as authority. To this were now added the four collections of Bernardo of Pavia, of Pietro Collivaccino, &c., which were regarded as works of authority till they were supplanted by the collection made under the supervision of Gregory IX, which even yet constitutes the greater part of the canonical law. To this Boniface VIII added, in 1298, the sixth book of decretals. Without dwelling on the most distinguished canonists, we pass to the principal historians, most of whom wrote with simplicity and integrity:—Goffredo of Viterbo (a German, who wrote a chronicle, from the creation of the world to 1168, under the title of *Pantheon*), Sicardus (author of a similar chronicle), Giovanni Colonna (author of a universal history—*Mare Historiarum*), Riccobaldi (author of a similar work, entitled *Pomarium*), the Sicilian Riccardo of San Germano (who relates, with much fidelity, events from 1189 to 1243), Matteo Spinello (whose history reaches from 1247 to 1263, and is the first learned work in Italian prose), Niccolò di Iamsilla, Saba Malaspina and Bartolomeo da Neocastro (whose works have been published by Muratori). Florence had its first historian in Ricordano Malaspini. The history of Milan was written by Filippo of Castelseprio, and the Dominican Stefanardo of Vimercate, and thus each province and city had its chronicler, whose names we have not room to enumerate. Grammar, which then comprehended the belles-lettres, had been hitherto neglected; but in the 13th century, it found students and teachers, as Buoncampagno Bertoluccio, Galeotto (who wrote in Italian, and translated Cicero's rhetorical books into that language), and, above all, Brunetto Latini, Dante's instructor, who has already been mentioned, and of whom, besides his above-mentioned *Tesoro*, we have several other works in prose, such as *La Rettorica di Tullio*, *De' Vizi e delle Virtù*, &c. At the close of this period, we must mention the famous Marco Polo, his father, Mat-

teo, and his uncle, Niccolò. They were among the first who made distant journeys through Asia, and rendered that part of the world better known to their countrymen.

Fourth Period.—From 1300 to 1400. Amid civil disturbances, the sciences continued to make great advances. While the emperors were attempting, in vain, to restore peace to Italy, and subject it to their authority, separate sovereignties and principalities were formed, the rulers of which emulated each other in their patronage of literature. Robert, king of Naples, was the most distinguished in this respect. After him ranked the Della Scala at Verona, the house of Este at Ferrara, the Gonzaga at Mantua, &c. The number of universities increased, and many of them, such as those of Padua, Naples, Pisa and Pavia, were very flourishing, though Bologna, formerly the first, fell into decay. The libraries were enriched with the works of the ancients, which were rescued from oblivion. Men like Petrarch and Boccaccio, by their researches and studies, rendered lasting services, as the restorers of learning. Both collected books, and the first collected also Roman coins. By the invention of paper, the multiplication of copies of the classics was facilitated. Their corruption by ignorant transcribers soon became evident. Criticism was required to restore them, and Coluccio Salutati, by the collation of several manuscripts, made a beginning in this art, and recommended it to others. Divinity was treated of by numberless scholastic theologians, but by most of them was obscured rather than illustrated. The following deserve honorable mention: Albert of Padua, Gregory of Rimini, Mich. Aiguani of Bologna, Bartol. Carusio of Urbino, Alessandro Fassitelli, who all taught at Paris, besides Porchetto de' Salvatici of Genoa, Raniero of Pisa or of Ripalta, Jac. Passavanti, Simon of Cascia, Peter of Aquila, Bonaventura da Peraga, Marsiglio Raimondini of Padua, and Lodovico Marsigli. Philosophy was highly complicated and obscure, as it was built on the mutilated and disfigured works of Aristotle, assisted by his Arabian commentator, Averroes, whose mistaken explanations were first made known, and were, in turn, expounded and illustrated by the monk Urban of Bologna. The only philosophical writer, who does honor to the age, is the famous Petrarca, who wrote several Latin works on moral subjects—*De Remediis utriusque Fortuna*; *De Vita solitaria*; *De Contemptu Mundi*;

De Ignorantia sui ipsius et Aliorum, &c. The rest that was written in the department of morality deserves mention only for the purity of the Italian, such as *Anmaestramenti degli Antichi volgarizzati*, by Bartolommeo of Pisa. Of the mathematical sciences, astronomy and, in connexion with it, astrology, were most cultivated. The most noted scholars, who devoted themselves to these branches, were Pietro of Albano, and Cecco of Ascoli,—the former distinguished for his *Conciliator*, in which the various opinions of famous physicians and philosophers are reconciled; the latter for an astrological work, for a treatise on the sphere, and his poem *Acerba*, for which he was burned as a heretic. Besides these, there were Andalone del Nero, who travelled much for the sake of enlarging his astronomical knowledge, and was esteemed by Boccaccio as the first astronomer of his age, and Paolo, surnamed *Geometra*, of whom Villani narrates, that he discovered all the motions of the stars, by means of instruments of his invention, and who is quoted by Boccaccio, as having prepared machines representing all the celestial motions. Jacopo Dondi and his son, Giovanni, gained reputation and the surname *Dall' Orologio*, by an ingenious clock, showing not only the hours, but also the course of the sun, moon and planets, as well as the months, days and festivals. Pietro de' Crescenzi, a Bolognese, wrote in Latin his even yet interesting work on agriculture; but, in the same century, there appeared an Italian translation of it, distinguished for its language and style. Medicine was zealously studied by a number of scholars, but was still, however, in a very imperfect state, and deserved at least in a measure, the ridicule with which Petrarca treated it. The celebrated school of Salerno was on the decline. The Arabians were every where esteemed as models and teachers. Among the most famous physicians of the times were the Florentine Dino dal Garbo, who wrote commentaries upon some writings of Avicenna and Hippocrates, and on the love songs of Guido Cavalcanti, also a treatise on surgery, &c.; his son Tommaso, Petrarca's friend, who wrote a *Summa Medicinalis*, and directions how to treat the plague, and explained Galen's works on the difference of fevers and on generation; Torrigiano Rusticelli, who wrote on Galen's *Ars parva*; Gentile of Foligno; Jacopo of Forlì; Marsiglio of Santa Sofia, and others whose works are forgotten; finally, Mundino of Bologna,

who was the first that wrote a complete work on anatomy, which was esteemed for two centuries. In jurisprudence, several persons were eminent as writers on civil law: Rolando Placiola; Albert of Gandino (*De Maleficiis*); Oldrado da Ponte (*Consilia and Quæstiones*); Jacopo Belviso (who wrote, among other things, on fiefs); Francesco Ramponi (who explained some books of the Codex); Cino (q. v.) of Pistoia; and the two most celebrated lawyers of this age—Bartolo and Baldo. In the canon law, which was extended by the Clementine decretals and Extravagants, the most illustrious was the Florentine Giovanni d'Andrea, who commented upon the six books of the decretals, and educated several distinguished scholars. In history, the increasing intimacy with the works of the ancients had the most favorable influence; it was freed from a great many errors and fables. Petrarca and Boccaccio distinguished themselves by several historical works, written in Latin;—the former by four books, *Rerum Memorandarum*, and biographies of famous men;—the latter by *De Genealogia Deorum*; *De Casibus Virorum et Feminarum illustrium*; *De claris Mulieribus*; *De Montium, Silvarum, Lacuum, Fluminum, Stagnorum et Marium Nominibus*. In addition to these, there is a long train of authors of general history and of chronicles; especially Benvenuto of Imola (who wrote a history of emperors, from Julius Cæsar down to Wenceslaus, and commented on Dante); Francesco Pipino of Bologna (who wrote a chronicle, from the time of the first Frankish kings down to 1314); and Guglielmo of Pastrengo (author of the first universal library of the writers of all nations, which displays a wonderful extent of reading for those times); the Florentine Paolino di Pietro, Dino Compagni, and the Villani (see *Villani*), who contributed much to the improvement of their native language; the Venetian Andrea Dandolo (who wrote a valuable Latin chronicle of his native city, from the birth of Christ to 1342); and Raffaello Caresini (who continued it till 1388); the Paduan Alberto Musato (who wrote several historical works in good Latin, partly in prose, partly in verse); and others. (See Muratori's *Scriptores*.) The want of proper teachers was a great obstacle, in this period, to the study of foreign languages. Clement V gave orders, indeed, for the erection of professors' chairs for the Oriental languages, not only in the papal cities of residence, but also in several universities at home and abroad, but with little effect. More was done for Greek

literature, especially through the instrumentality of Petrarca and Boccaccio: the two Calabrians Barlaamo and Leonzio Pilato were the most zealous cultivators of it. At Florence, the first professorship of the Greek language was founded and conferred on Leonzio Pilato, by the influence of Boccaccio. In this period occur the first Italian tales and romances. The oldest collection of tales extant is the *Cento Novelle antiche*,—short and very simple stories by unknown authors. These were followed by Boccaccio (q. v.) with his *Decameron* and his *Fianchetto*, by which he became the real creator of the Italian prose, in all its fullness, luxuriance and flexibility: his imitators were Francesco Sacchetti, author of a collection of tales, and Ser Giovanni, author of *Pecorone*, both, however, far inferior to Boccaccio. Dante (q. v.), too, must be mentioned, both on account of his Italian works, the *Vita Nuova* and the *Convito*, and also on account of his *De Monarchia*, and *De Vulgari Eloquentia*. Connected with this is the *De Rhythmis Vulgaribus* of Ant. di Tempo, which treats, though imperfectly, of Italian verse, as the former had treated of Italian prose, and the various kinds of style. In general, grammar and elegance of style were much cultivated by reason of the study of the ancients. Not only were the models of antiquity translated and explained, but a professorship was founded at Florence for illustrating Dante. Yet the specimens of elegant prose are few. Among the writers of travels of this century, Petrarca and the Minorite Odorico of Pordenone hold the first rank. The former made a journey to Germany, and gives an interesting account of it in his letters; he also wrote for a friend an *Itinerarium Syriacum*, without having ever been in Syria himself. Odorico travelled through a great part of Asia as a missionary, and, after his return, published a description of his travels, which may be found in Ramusio's work, but unfortunately so altered, that we can hardly venture to give credence to the accounts.

Fifth Period.—From 1400 to 1500. During this century, notwithstanding the continuance of internal troubles, Italian literature was in a highly flourishing condition. Two events, in particular, had a favorable influence: first, the conquest of Constantinople by the Turks, in consequence of which many learned Greeks fled to Italy, and diffused knowledge there; secondly, the flourishing state of the house of the Medici in Tuscany, the members of which

were distinguished for their patronage of the arts and sciences, and were emulated by the Visconti, Sforza, Este, the kings of Naples, the marquises of Mantua and Monterrat, the dukes of Urbino, and other princes, popes, magistrates and private persons. Without dwelling on the universities, we merely say, that two new ones were added at Parma and Turin. In the preceding century, an academy of poetry had been established, and scientific academies were now instituted. The first of this kind was founded by the great Cosmo, at Florence, for the revival of the Platonic philosophy. Similar societies were formed at Rome, at Naples, and, under the patronage of the learned Aldus Manutius, at Venice. Men like Guarino of Verona, Giovanni Aurispa, and Francesco Filelfo, brought the works of the Greeks from obscurity; others were not less zealous in the cause of Roman literature. Public and private libraries were established in several places. This progress was promoted by the invention of printing, which was quickly spread and brought to perfection in Italy. As ancient literature became more generally studied, antiquities likewise attracted greater attention. Ciriaco of Ancona, in particular, thus gained a high reputation. No one of the many learned theologians of these times is much distinguished. We shall merely mention Nic. Malermi, or Malerbi, who first translated the Bible into Italian; Bonino Mombriozio, who collected the lives of the martyrs; and Platina, who, with great erudition, and not without critical acuteness, wrote the history of the popes, in an elegant and forcible style. After the arrival of the Greeks in Italy, a new impulse was communicated to the study of philosophy. Among several others, Paolo Veneto had already acquired fame as a philosopher by his logic or dialectics, and his *Summula Rerum naturalium*, in which he illustrated the physics and metaphysics of Aristotle. Among the Greeks who fled to Italy in the first half of this century, one of the principal was Johannes Argyropulus, of whom Lorenzo de' Medici, Donato Acciaiuoli and Politian were scholars. Without entering into controversies, he explained Aristotle, and translated several of his works. But after him, Georgius Gemistus (also called *Pletho*) gave rise to an obstinate contest respecting the relative superiority of Aristotle and Plato. He himself, as the advocate of Plato, ridiculed Aristotle and his admirers. Georgius Scolarius (afterwards patriarch of Constantinople) answered with vehe-

mence, and provoked Pletho to a still more violent reply. The famous Theodore Gaza, the cardinal Bessarion, and George of Trebisond, took part in the controversy. On the other hand, the admirers of Plato, at Florence, remained quiet spectators. The Platonic academy, founded there by Cosmo, was in a flourishing state. Marsilius Ficinus, and Johannes Picus of Mirandola, were its chief ornaments. The former translated the works of Plato into Latin, and wrote on the philosophy of Plato and of the Platonists. Their most eminent successors were A. Politian and Cristoforo Landino. Astronomy was still mixed with astrology. Some of the most learned astronomers were Giovanni Bianchino, whose astronomical tables of the orbits of the planets were several times printed; Domenico Maria Novara, instructor of the great Copernicus; and, above all, Paolo Toscanello, celebrated for the sun-dial made by him, in the cathedral at Florence. Mathematics and music now revived in Italy. One of the restorers of arithmetic and geometry was Luca Paccioli of Borgo San Sepolcro. Leone Battista Alberti, the author of numerous works on architecture, wrote in a manner no less elegant than profound; he was also the author of valuable treatises on other subjects. The first writer on the art of war, was Robert Valturio da Rimini. For music, Ludovico Sforza first founded a public school at Milan, and made Franchino Gafurio its teacher, from whose pen we have several works, such as a Theory of Music; also, a work on the practice of music, and a treatise on the harmony of musical instruments. Medical science was but little promoted, considering the number of physicians; they were satisfied with collecting the observations of their predecessors. Bartol. Montagna (*Consilia Medica*, and observations on the baths of Padua), Giov. di Concorreggio (*Praxis nova totius fere Medecine*, &c.), Giov. Marliano, likewise an able mathematician and philosopher (a commentary on Avicenna), Gabriel Zerbi, Alessandro Achillini and Nic. Leonicensio (who exposed the errors of the ancients in a particular work, and was perhaps the first who wrote *De Gallico Morbo*), were distinguished in anatomy. Civil jurisprudence still stood in high estimation. In it were distinguished Cristoforo di Castiglione and his scholars, Raffaello de' Raimondi and Raffaello de' Fulgosi, who wrote *Consilia*, and explanations of the digests; Giovanni of Imola, who wrote a commentary on the first part

of the *Digestum novum*; Paolo of Castro, who wrote explanations of the code and digests; Pietro Filippo Corneo, who left legal *Consilia*; Antony of Pratovecchio, who improved the feudal law, and wrote a *Lexicon Juridicum*; Angelo Gambiglione, who wrote *De Maleficiis*, &c.; the great Accolti of Arezzo, Alessandro of Imola, surnamed *Tartagni*, who left many law treatises on the digests, the code, the decretals and Clementines, many *Consilia*, &c.; Bartol. Cipolla, who wrote *De Servitutibus*; Pietro da Ravenna, who, besides several legal works, wrote rules for the art of memory, under the title *Phoenix*; Bartol. Soccino and his opponent, Gasone dal Maino, and many others. In canonical law, the most famous authors were Nic. Tedeschi, Giov. of Anagni, Ant. Roselli, Felino Sandeo and the cardinal Giannantonio da San Giorgio. History made the greatest progress; it aimed not only at truth, but also at beauty of diction. Among the many historians of this period, some may be regarded as models of historical description. Roman antiquities and ancient history were treated of by Biondo Flavio, whose principal works are *Roma instaurata*, *Roma triumphans*, *Italia illustrata*, *Historia Romana*, *De Origine et Gestis Venetorum*; Bernardo Rucellai (*De Urbe Roma*); Pomponio Leto (*De Antiquitatibus Urbis Rome*, *De Magistratibus Romanorum*, *Compendium Historiæ Romanæ*), &c.; and Annio of Viterbo, whose *Antiquitatum variarum Volumina XVII* contain the works of ancient authors, now acknowledged to be spurious. Histories from the beginning of the world to their own times, were written by the archbishop Antonio of Florence, Pietro Ranzano, Jac. Filippo Foresti, Matteo and Matthia Palmieri, and Sozomeno, all of which are valuable only as far as they treat of their own times. As historians of their times, and of their country in general, the following are deserving of notice: Æneas Sylvius, afterwards pope Pius II, who left a great number of historical works, and whose history of his own times has been continued by cardinal Jacopo Ammanato; Giov. Mich. Alberto of Carrara, Leonardo Bruni of Arezzo, the Florentines Poggio and Bartolommeo Scala; the Venetians Marco Antonio Sabellico, Bernardo Giustiniano; the Paduans Pietro Paolo Vergerio and Michael Savonarola (the physician); the Vicentine Giambattista Pagliarini; the Brescian Jacopo Malvezzi and Cristoforo da Soldo; the Milanese Andrea Biglia, Pietro Candido Decembrio, Lodrisio

Crivelli, Giovanni Simonetta, Giorgio Merula, Donato Bosso, Bernardino Corio and Tristano Calchi; the Neapolitans Lorenzo Valla, Bartolommeo Fazio, Antonio Panormita, Gioviano Pontano, Michele Ricci, Giovanni Albino, Tristano Caraccioli, Antonio Ferrario and others, to whom is to be added Pandolfo Collenuccio of Pesaro, the only one who wrote a general history of Naples. Giorgio and Giovanni Stella, and Bartolommeo Senerega and Jacopo Bracello wrote the history of Genoa. Savoy had, in this period, two historians,—Antonio of Asti (who wrote a chronicle of his paternal city in verse), and Benvenuto da San Giorgio (a history of Montferrat, accompanied with documents). As a historian of Mantua, Platina deserves mention. As geographers were distinguished Cristoforo Buondelmonte, who travelled in Asia; Francesco Berlinghieri, who wrote a geographical work in verse; Caterino Zeno, who described his travels through Persia; the famous navigators Cada Mosto, Amerigo Vespucci and Cabotto (Cabot) and others. In the Oriental languages, Giannozzo Manetti was distinguished. The study of the Greek language was spread by Manuel Chrysoloras, Lascaris, and many other Greeks, who fled to Italy, on whom and on their scholars, some of them men of great learning, we cannot here dwell. With no less zeal was Roman literature cultivated. The names of Guarini, Aurispa, Filelfo, Lorenzo Valla and Angelo Poliziano are distinguished.

Sixth Period.—From 1500 to 1650.—In this period, Italy attained the summit of its greatness. Its rich materials for satisfying both the physical and intellectual wants of man; the power of its republics and princely houses; their zeal and munificence in favor of all that could restore the splendor of ancient times, made Italy a model for the rest of Europe. The wars which Ferdinand the Catholic, Maximilian I, Charles V and Francis I prosecuted on her soil, did not, therefore, produce permanent injury. The former universities continued, and new ones were added, among which that of Padua was eminently conspicuous. The number of academies and libraries increased to such a degree, that hardly a city of importance in Italy was without them. Among the popes, there were many patrons and promoters of the arts and sciences, particularly Julius II, the magnificent Leo X, Clement VII (whom unfavorable circumstances did not allow to accomplish his designs, but whose place

was supplied, in many respects, by the cardinal Hippolitus of Este), Paul III, Gregory XIII (who, as Ugo Buoncampagno, had edited an improved and enlarged edition of the *Corpus Juris canonici*, and, as pope, corrected the calendar), Sixtus V (who removed the library of the Lateran to the splendid palace of the Vatican, and enlarged it, completed the publication of the works of Ambrosius and of the Septuagint, caused a new edition of the Vulgate to be published, &c.), and Urban VIII (who united the Heidelberg library with the Vatican, and founded the Barberini). We must next mention, as scholars and patrons of scholars, the cardinals Bembo, Carlo and Federigo Borromeo (the last was the founder of the Ambrosian library at Milan), and Agostina Valerio. The princes were not behind the popes and cardinals. The most distinguished for activity and liberality were the Gonzaga of Mantua, the Este at Ferrara, the Medici at Florence, and the duke Charles Emmanuel I of Savoy. Notwithstanding favorable circumstances, theology made but slight advances; for after the storm of reformation had broken out in Germany, established doctrines were more obstinately maintained, and farther investigation discouraged, with the exception of the editions of the Septuagint and Vulgate already mentioned. The study of the Holy Scriptures gained but little by the literary treasures that Italy possessed. Cajetan, the most celebrated commentator on the Bible, effected nothing worthy of note; and Diodati's translation, as it was not modelled servilely on the Vulgate, found no favor. Among the defenders of the established creed, cardinal Bellarmin surpasses all the others in intrinsic merit. Cesare Baronio, the historical defender of the disputed papal prerogatives, brought to light the most important documents and monuments; and Paolo Sarpi, the assailant of them, united modesty, and an incorruptible love of truth, with the deepest insight into the Catholic religion. But, notwithstanding all exertions to uphold the established doctrines of the church, the active spirit of philosophy could no longer be restrained, not even in Italy. Besides the scholastics in the monasteries, and the Peripatetics among the Humanists, who revived and explained the ancient systems of philosophy, there appeared a philosophical sect of free-thinkers, who, together with the superstitions, rejected religion also. Pietro Pomponazzi, who taught annihilation after death, left behind a numerous

school of sceptics, to which belonged scholars like cardinal Gonzaga, Contarenius, Paul Jovius and Julius Cæsar Scaliger. By their side stood Bernardino Telesio, also a preacher of infidelity, like Pomponazzi and his school, honored by the great, while Cesare Vanini and Giordano Bruno atoned for a smaller measure of impiety at the stake; and Campanella, who, as the opponent of Aristotle, and an independent thinker, prepared the revolution that took place in the 17th century, languished in prison. This spirit of inquiry gave an impulse to mathematics and physics. B. Telesio, Giordano Bruno and Th. Campanella endeavored to deduce the phenomena of nature from general principles. Hiero. Cardanus united these speculations with mathematics. The great Galileo brought mathematics and natural philosophy into the closest connexion by new experiments, and became a model to all, especially to the naturalists of his native country. In mathematics, Tartaglia, Cardanus and Bombelli were distinguished for their labors in algebra; Buonaventura Cavalieri prepared the way for the infinitesimal calculus; Commandino became celebrated for his labors on Euclid's Elements, and Marino Gheraldi explained Archimedes' theory of hydraulics. Luca Valerio enlarged the limits of mechanics by his discoveries; Castelli produced a revolution in hydraulics; Maurolico opened the way in optics; Della Porta invented the camera obscura, and made the first experiments in aërometry; Grimaldi discovered refraction; Magini perfected the burning glass; Torricelli invented the barometer, and Riccioli made important celestial observations. Natural knowledge was amplified in all its branches. As students of the human frame and anatomists, Fracastori, Fallopio, Piccolomini, Aggiunti and Malpighi were celebrated. Ulyss. Aldrovandi travelled through Europe, to investigate the natural history of quadrupeds, birds and insects, and established a botanical garden at Bologna. Similar gardens were laid out by the university of Padua, by Cosmo duke of Florence, and various private persons. As botanists, Mattioli, Fabio Colonna, and the above-mentioned Malpighi, were distinguished. The academy of the Lincei labored in the cause of natural history from 1625 to 1640. The first professorship of chemistry was founded at Pisa, in 1615. In physics and medicine, the men of most note are Fallopio and his great scholar Fabricius ab Acquapendente (who led Harvey to the discovery

of the circulation of the blood), Borelli, Torricelli, Bellini, Malpighi and Alpini. Among the jurists of this period, we find no great names after the age of the scholastics. History was cultivated with greater success. Historians and historical inquirers treated particularly of native history; Carlo Sigonio wrote a general history in Latin, Girolamo Briani in Italian, and, finally, Guicciardini in a classic style, in which his continuator, Adriani, is inferior to him. In local history, Macchiavelli's History of Florence was the earliest masterpiece of modern time. Davila, Bentivoglio, Bembo (both for his History of Venice—a continuation of the work of Andrea Navagiero—and for his *Asolani* and Letters), Angelo di Costanzo, Varchi, Paolo Sarpi, the cardinal Bentivoglio and others, are likewise celebrated. Numberless are the historical, geographical and topographical descriptions of single states, districts, cities, and even of monasteries, libraries and cabinets. Men like Paolo Giovio, Giambattista Adriani and Vittorio Siri were assiduous in preserving the memory of the literary services of their contemporaries and predecessors. Since the end of the 15th century, Venice had been the centre of diplomacy and politics. Much was written there on political subjects, as Sansovino's work on Government, and Botero's State Policy. The study of the Oriental languages was promoted by religious motives. The Maronites on mount Lebanon were received into the Catholic communion. In order to render the union indissoluble, Gregory XIII erected a Maronite college in Rome, and established for its use an Arabic press. Sixtus V added salaries. This institution transplanted Oriental literature to Rome, and carried thither a great number of manuscripts. George Amira (who wrote the first Syriac grammar of consequence), Ferrari (who compiled the first Syriac dictionary), Gabriel Sionita and Abraham Ecchellensis were distinguished. From Roman presses issued the Arabic works of Ebn Sina, the geography of Sherif Edrisi, the Arabic commentary on Euclid. At Genoa an Arabic, and at Rome an Ethiopian Psalter had been previously printed. Giggeus published at Milan the first complete Arabic dictionary, and Maraccius, at Padua, the first edition of the Koran, illustrated by a commentary. Thus Italy was the seat of the study, not only of the Hebrew, but also of the other Shemitish languages. The study of the ancients must have been increased to a

great degree, after the art of printing had multiplied the copies of their works. Francesco Robertelli, Julius Cæsar Scalliger, Pietro Vittorio and Fulvio Ursino deserve the name of philologists. Others paid more attention to the information afforded by the ancients, and this study was facilitated by translations. Monuments of antiquity were collected, examined and explained with zeal. Mazzochio, and still more Andrea Fulvio, beginners, indeed, in the science, published ancient Roman inscriptions and coins. Giacomo and Ottavio di Strada made similar researches with greater success, and at length Fulvio Ursino illustrated this department with treasures of erudition. After him, Francesco Angeloni and Giovanni Pietro Bellori, Filippo Buonarroti, Filippo Paruta and Leonardo Agostino acquired reputation. But, in consequence of the study of the ancients, classical perfection of style became the aim of literature. The historians distinguished in this respect have already been named. Of a similar character, in point of style, are Sperone Speroni (*Dialoghi* and *Discorsi*), Annib. Caro (*Lettere Famigliari*, &c.), Castiglione (*Il Cortegiano*), Della Casa (*Il Galateo* and *Lettere*), Giovanbattista Gelli (*Dialoghi*), Franc. Berni (*Discorsi* and *Capricci*), Pietro Aretino (*Ragionamenti*, &c.), Nicolo Franco (*Dialoghi Piacevolissimi*), the two poets Bernardo and Torquato Tasso (the former for his Letters, the latter for his Philosophical Essays and Dialogues); finally, Pietro Badoaro (*Orazioni*), Alberto Lollio (*Lettere* and *Orazioni*), Claudio Tolommei and others. The *Ciculate*, as they were termed (*academic prate*), pieces in ridicule of the academies, published after the foundation of the Crusca, in the last half of the 16th century, are valuable principally in point of style. The early novelists found several imitators in this period; Bandello (q. v.), Firenzuola, Parabosco, Massuecio, Sabadino degli Arienti, Luigi da Porto, Molza, Giovanni Brevio, Marco Cadamosto, Grazzini, Ant. Mariconda, Ortensio Lando, Giov. Francesco Straparola, Giambattista Gibaldi, called *Cinthio*, to which are added the romance writer Franc. Loredano and the original Ferrante Pallavicino. Criticism began at last to erect its tribunals; but the principles on which it judged were vague and indefinite. This is proved by the contests respecting Tasso's Jerusalem Delivered, Guarini's *Pastor Fido*, by Tassoni's attack on Petrarca, &c. There was no want, however, of theoretical works. By his excellent essay *Della Volgar Lin-*

gua, Bembo became the father of Italian criticism. Trissino (Poetics) and Castellano are not without merit. Claudio Tolommei wrote rules for modern poetry; Sperone Speroni, Dialogues on Rhetoric (Sansovino, Cavalcanti) and others had already preceded him; Benedetto Varchi, a Dialogue on the Tuscan and Florentine Language (on occasion of the contest between Caro and Castelvetro), and Foglietta, On the Manner of writing History.

Seventh Period.—From 1650 to 1820.

Hitherto, Italy had been the intractress of Europe, but, in the middle of the 17th century, it began to sink from its literary eminence. The principal causes of this change were the restrictions on the freedom of thought and of the press, which had been constantly increasing, ever since the reformation, and the decrease of wealth since Italy had lost the commerce of the world. The moral corruption, which became more and more prevalent, had enervated the physical strength of the people, and deprived the mind of its vigor and energy. The long subjection to foreign powers had created a servile feeling. The nation was afflicted, from 1630 to 1749, by numerous wars, and at length sunk into a lethargy and a stupid indifference to its own greatness. Some popes, princes, and even private persons, were, nevertheless, the active patrons of letters. At Florence, Sienna, Bologna, Turin, Pisa, institutions were established, some at great expense, by Leopold de' Medici, the count Marsigli Pazzi, &c., which promoted the cultivation of mathematics and natural science. Clement XI, Benedict XIII and XIV, Clement XIV, men of great learning and enlightened views, together with the cardinals Tolommei, Passionei, Albani (Annibale and Alessandro) and Quirini, and, in later times, the cardinal Borgia, the learned Venetian Nani, and the noble prince of Torremuzza, rendered the greatest services. The reign of Maria Theresa and Leopold was favorable to Lombardy and Florence. But none of the sciences, except the mathematical and physical, made much progress. After Machiavelli, politics had no general writer of importance: only single departments of the subject, far removed from danger of collision with the doctrines of the church, were treated with spirit by Beccaria and Filangieri. Philosophy continued scholastic: Italy neither invented any new system, nor gave admission to the systems of foreign countries. Theology gained not a single thinker. Though highly esteemed in his native country, the dog-

matic system of Berti was of little value. The works of Ughelli and Lucentius, entitled *Italia Sacra*, evince the industry of the compilers; as do Galland's Library of the Fathers of the Church, and Mansi's Collection of Councils. Bianchini's fragments of old Latin translations, and De' Rossi's various readings of the Hebrew text of the Old Testament, are valuable; but scriptural criticism and exegesis have produced nothing in Italy important for foreign countries. The authority of the Vulgate is still unimpaired, and the translation of the Florentine Antonio Martini, celebrated for its pure style, was made from it. But for the study of the Asiatic languages and literature, the missionary zeal has had the most beneficial results. The learned J. S. Assemani published rich extracts from Oriental manuscripts. The Propaganda formed excellent Oriental scholars, and published several Asiatic alphabets and grammars. As regards the critical study and illustration of the ancient classics, the Italians have remained behind other countries. The most eminent scholars in the department of Latin literature are Volpi, Targa, Facciolo, and, as a lexicographer, Forcellini; in that of the Greek, Mazocchi and Morelli. Much more was done for investigating, copying, describing and illustrating antiquities, especially after Winckelmann had taught the Italians to examine them, not only in a historical and antiquarian point of view, but also as works of art. This study led likewise to the investigation of the primitive languages of Italy, especially the Etruscan. Gori, Maffei, Lami, Passeri, opened the way for Lanzi. Polite literature, particularly elegant prose, of which alone we here speak, continued to decline till an effort was made, after the time of Voltaire, to imitate the French. Thus Algarotti wrote Dialogues on Optics elegantly and perspicuously, but superficially; Bettinelli, On Inspiration in the Fine Arts, with much spirit; Beccaria, On Crimes and Punishments; Filangieri, On Legislation, with dignity and simplicity; Gasparo Gozzi, Dialogues, in a pure and agreeable style. In history and its auxiliary sciences, little was done in this period. Giannone was eminent in local, Denina in general history. As an investigator and collector of historical materials, Muratori acquired a lasting reputation: Maffei also should be honorably mentioned. Manni labored for the illustration of seals, and of genealogy. Still less was done for geography. The most celebrated geographer of Italy is the Minorite Vincentio Coro-

nelli, who established a cosmographical academy at Venice, and whose loss (1718) has never been supplied. Even among travellers, there are but few prominent. Something was done by Martini, who travelled through Cyprus, Syria and Palestine; by Sestini, who travelled through Sicily and Turkey; Grisellini, who travelled through Inner Austria and Hungary; and Acerbi, who travelled in the North. No jurist, except Beccaria and Filangieri, effected any thing of importance. But the works which appeared in the mathematical, physical and medical sciences still form the boast of Italian literature. Frisi and Girolamo Mazzucchelli were great masters in mechanics, hydrostatics and hydraulics; Boscovich and Mascheroni in the higher analysis and geometry. In mensuration, Lorgna, Fontana, Cagnoli, Ruffini and Casella are respected names even in our day. Manfredo Settala made a celebrated burning-glass; Cassino enlarged the bounds of astronomy by great discoveries; Campani was distinguished for preparing optical glasses; Torelli explained the elements of perspective with geometrical strictness; Zanotti presented the world with valuable celestial observations; and Piazzzi acquired renown as the discoverer of Ceres. Physics, for the promotion of which several institutions were active in various places, made the greatest progress. Marsiglio Landriani, Felice Fontana, Toaldo, Tiberio Cavallo, Giovanni and others enriched it by important discoveries. Botany was advanced by Malpighi, Giovanni Seb. Franchi, Micheli, Giuseppe Ginanni, Vitaliano Donati, &c. The Italians were successful in the use of the microscope. With its assistance, Redi (who wrote classical works on natural history), Valisneri, Felice Fontana, Lazzaro Spallanzani, made a great number of observations. With all the lovers of natural science and of chemistry, Volta is an honored name. In the study of the natural history of man and of anatomy, Gagliardi, Malpighi, Paolo Manfredi, and, after them, Valsalva, Santorini, Fantoni and Morgagni were distinguished. Practical medicine likewise was not neglected. Franc. Torti taught the use of Peruvian bark; Rammazini trod in Sydenham's footsteps in pathology and therapeutics; Borelli, Baglivi (who followed Hippocrates, however, in practice), Guglielmini, Bellini and Michelotti made Italy the birthplace of the Iatromathematical school in medicine. In literary history, the labors of Crescimbeni, Quadrio Fontanini, A. Zeno, Mazzucchelli Fabroni, Tiraboschi, Corni-

ani and others (of Artega, for example, for the history of the opera), are highly valuable.

Eighth Period.—*Italian Literature of the present Day, since 1820.* Of late years, the literature of Italy is not to be compared, either in extent or in profoundness, with the literature of the neighboring countries. The indolence which springs from a too favorable climate, the restraints arising from the political state of the country and the condition of the book trade, which, in several parts of the peninsula, is under great restrictions, oppose serious obstacles to the free interchange of ideas. The infringements in one city on the copyrights of others increase these difficulties. The universities of Pavia and Padua still maintain their hereditary reputation, and augment it by a zealous cultivation of the natural sciences; Pisa may stand next to them; Sienna and Perugia have made less effort to deserve the notice of foreign countries, and the universities of Rome, Naples and Turin are of a limited character. With these universities, to which, in Lombardy, gymnasia and elementary schools afford suitable preparation, a number of academies are appropriated to every department of science and art, though they are not all so active as the Lombardo-Venetian institution at Milan, which has published several valuable volumes of memoirs. Names like Oriani, Carlini, Breislak, Configliachi, Brunatelli, are the best pledges of its devotion to the exact sciences. After it, the academy at Turin (*Memorie della R. Acad. delle Scienze di Torino*, vol. xxx, 1826), and the scientific society of Modena (*Memorie della Società Ital. delle Scienze residente in Modena*, t. 19), deserve honorable mention. Foreign countries rarely hear any thing concerning the scientific bodies of Naples. The Herculean academy at present pays, for the most part, with promises, and the sessions of many other academies are mere ceremonies. The *Crusca* and the *Accad. de' Georgofili* at Florence, with the *Accad. Archeologica* at Rome, alone sustain their place in the memory of foreign countries. Among the periodicals, the *Biblioteca Italiana* is a work of merit, and exerts a decisive influence by means of sagacious criticisms; but it has been often disfigured by injustice and harshness, especially when under Acerbi's guidance. Brugatelli and Configliachi's *Giornale di Fisica, Chimica, Storia naturale, Medicina ed Arti*, is the periodical most deserving the notice of foreign countries. The study of the Oriental languages, in Italy, is not so much advanced

as in other countries. Gr. Castiglioni's explanation of the coins in the cabinet of Milan have found an impartial critic in Frahn of Petersburg; and Rampoldi's *Annali Musulmani* (Milan, 1823, 5 vols.) display a judicious and critical use of Oriental sources. Much has been done for the diffusion of the knowledge of the Armenian language by the publications of the Metocharists of St. Lazzaro, in the vicinity of Venice; and father Auger, the Venetian editor of Moses of Chorene, and the discoverer of an ancient Armenian translation of Philo (Ven., 1822), is said to be distinguished for knowledge of the language. Europe acknowledges Angelo Maio's merits in increasing the means of acquiring a knowledge of ancient classical literature. The discovery of the fragments of Cicero *De Republica*, and of so many other remnants of a classic age (though the complete *Fronto* did not correspond to its fame and the general expectation), give Maio lasting claims to the gratitude of scholars. Maio's success induced professor Peyron, at Turin, to make similar searches into the treasures of the public library intrusted to him, and his sagacity was not altogether fruitless; Mazzucchelli of Milan contributed to the extension of ancient literature by the *Johanneis* of Corippus (Milan, 1820), and Rossini by the publication of Eudemus, from Herculean manuscripts. Ciampi, after his return from Warsaw to Italy, Manzi, Amati, Nibby, are among those who have rendered service to classical literature by valuable commentaries. The count Ippoliti Pindemonti's translation of the *Odyssey* (Verona, 1822, 2 vols.), the odes of Pindar, by Mezzanotte (Pisa, 1819 and 1820, 2 vols.), and the Isthmian odes (*Le Odi Istmiche di Pindaro, traduzione di Gius. Borghi*, Pisa, 1822), by Borghi, Mancini's *Iliad*, in stanzas (Flor., 1824), can satisfy those only who do not exact a strict fidelity of translation. Among the translations from modern languages into the Italian, are the works of sir Walter Scott and Byron. Klopstock's *Messiah* was translated by Andrea Maffei. Bossi's *Storia d'Italia antica e moderna* (Milan) dwells very long on ancient times, and shows frequent traces of French influence. There still appear historical works, which are better received by foreigners than by the country to which they belong; as the above-mentioned *Famiglie celebri Italiane* of the count Pompeo Litta (Milan, since 1820); the *Storia di Milano*, by Rosmini; the *Codice diplomatico Colombo Americano* (Genoa, 1823); Scina's *Prosp. della Sto-*

ria letter. della Sicilia, and Spotorno's excellent *Storia letter. della Liguria* (Genoa, 1824); Beuci's *Elogi*, and Affò's *Vita di Pierluigi Farnese*, though the last belongs to the more favorite department of biography, for which materials may be found in Pelli's *Memorie per la Vita di Dante* (Florence, 1823); Nelli's *Vita e Commercio Letterario di Galileo Galilei* (Florence, 1793, but not published till 1820), and contributions in the *Biografia Cremonese*, by Lancetti, and in the Italian edition of the *Biografia Universale* (Venice, Missiaglia). One hope, however, notwithstanding such are the signs of the times, remains to the friend of Italian literature, that the abundance of monuments of former times in this land will always preserve alive historical recollections. The explanation of the present gives an opportunity to recur to the past, and to animate its dim recollections by their connexion with tangible realities. How interesting, for example, is the history of the cathedral of Milan! But Italy's associations are not limited to Christian times. *L'Italia avanti il Dominio de' Romani*, by Micali (new ed. Livorno, 1821, folio), indicates the point to which the inquirer may ascend. Investigations connected with ancient monuments cannot be wanting in a country where so much remains to be explored. Inghirami's *Monumenti Etruschi o di Etrusco Nome*, the illustrations of the editor of the *Galleria di Firenze*, so far as they relate to ancient monuments; the Memoirs of the archaeological academy of Rome, and the rare works of the Bourbon academy, are among the phenomena not to be overlooked in foreign countries; and the essays of Nibby, Fea, Borghesi, Lama, Cattaneo and Brocchi unite solidity with perspicuity and a comprehensive survey. But how little the proper mode of treating this department is understood, may be seen from Verniglioli's *Lezioni dementarie di Archeologia* (Verona, 1822, 2 vols.), which are as useless to foreign countries as Labu's investigations on Roman inscriptions, which either treat of what is well known, or explain obscurely whatever they give of new. The *Raccolta di Antichità Greche e Romane ad Uso degli Artisti, dis. ed. Incise da Gio. Bignoli*, is not without merit. The activity of the trade in works of art in Italy promotes also the publication of views of the monuments of the middle ages (for example, the *Monumenti popolari di Toscana*, the *Raccolta degli migliori Fabbriche, Monumenti ed. Intichità di Milano*; the *Fabbriche di Venezia*, Franchioni, Cisa di Gresy, Piola, Ventu-

roli, Bonati), for explaining which associations of men of talent have been formed. Almost every book of travels by an Italian, presents inquiries into the remains of antiquity; and Belzoni, who first kindled the enthusiasm of the succeeding travellers for investigating the remains of Egyptian art, only followed the taste of his country. Della Cella, the naturalist Brocchi, one of the most intelligent of the late writers of Italy, the learned writer on numismatics Sestini, and Camillo Borghese, prove this position. It is not, however, so much the custom in Italy to embellish travels with engravings as it is in France and England. Even the descriptions of cities, of which new ones are ever in demand, are without this embellishment, and retain their old defects. Italy is more independent in the exact sciences than in its literature, properly so called, particularly in the physical department, and by its mathematicians, astronomers, naturalists, has acquired a reputation, to which it has been less true in the fine arts, with the exception of the plastic arts. Where men like Sangro, Flauti, Borgnis, Brunacci, Lotteri, Bordoni, employ themselves in geometry and its application to geodesy and mechanics; where astronomers like Plana, Brambilla, Inghirami, Oriani, Carlini, Piazzzi, Cacciatore, De Cesaris, are engaged in observatories like those at Naples, at Palermo, at Milan, Turin, Bologna, Florence, Rome,—the sciences must make a rapid progress. The *Correspondance astronomique* of baron Zach (see Zach) afforded the Italian scholars an opportunity to make their discoveries and researches known to the rest of Europe. Zach, who lived in Genoa till 1827, promoted thence the diffusion of useful knowledge connected with his science, by an *Almanacco Genovese*. Unhappily, a part of the strict mathematical investigations is buried in the transactions of literary societies; for example, in the Transactions of the royal academy of sciences at Naples; in the Transactions of the Pontonine society (Naples, 1819); in the Memoirs of the Lombardo-Venetian institute; in the Reports of the scientific society at Modena; in the *Ricerche geometriche ed idrometriche fatte nella Scuola degl' Ingegneri pontifici d'Acque e Strade* (Rome, 1820), which but too rarely pass the Alps. Geodesy, especially, is prosecuted with great ardor, and two trigonometrical measurements, connected with each other, have given satisfactory results. Equal zeal is manifested in the physical sciences, in which names like Zamboni,

Brugnatelli, Configliacchi, Bellingeri and Ranconi answer for the exactness of the observations and correctness of the calculations. The experiments on magnetism and electricity (Banarelli) have excited a lively interest even in Italy, and Configliacchi's and Brugnatelli's *Giornale di Fisica, Chimica, Storia Naturale, Medicina ed Arti*, which is published very regularly, gives the best account of their variety and thoroughness. Even the *Opuscoli scientifici di Bologna* are almost exclusively devoted to the natural sciences in the widest comprehension, and maintain an honorable name. The geological observations of the count Marzari Pencati, who thought himself able to refute by ocular evidence the Wernerian theory of the formation of the earth, have attracted much attention. Among the geologists of Italy must be mentioned the talented and learned Brocchi (who died in 1827, in Egypt), the author of the *Conchyliologia subapennina*, and who, by his interesting essays, did much towards increasing the popularity of the *Bibl. Ital.* Renier, Corniani, Monticelli and Covelli (*Prodomo della Mineralogia Vesuviana*) keep up the interest in these studies. Patronised by government, the physical sciences have received the most extensive application to agriculture and technology, which have made respectable progress, at least in Upper Italy. New branches of industry, as well as new kinds of plants (rice from China, and grain from Mongolia), have been introduced; and the best mode of rearing silk-worms, manufacturing wine, and managing bees, has been made the object of public investigation, and the results have been very favorable. The labors of the *Accad. de' Georgofili*, at Florence, have contributed much to the promotion of agriculture. Botany cannot be slighted in the Garden of Europe. Savii's *Elementi di Botanica*, afford foreign countries nothing new, but the works of Sebastiani, of Mauri, of Brignoli, Moricand, Tenore, of the superintendents of the gardens at Pisa, Rome, Naples, Palermo, evince the interest which is taken in this department; and the *Pomona in Rilevia* of Pizzagalli, and Degaspari and Bergamaschi's *Osservaz. Micologiche*, evince the zeal of their authors. The investigation of the higher economy of nature has received valuable contributions from Brunatelli, Configliacchi, from Angelini, Metaxa, the describer of the *Proteus anguineus*, Ranzani, Petagna, Laurenti and Cavolini; and the structure of the human body was illustrated by Palletta, Mascag-

na and others. The medical literature of Germany has attracted much attention, and several of the most distinguished German writers in this department have obtained successful translators and editors, especially for the use of the lecturers in Pavia, Padua and Bologna. Many of the German works in the department of metaphysics have been also translated, although the French, like Destutt de Tracy, accorded more with the taste of the Italians. Besides Gioia, the author of the *Ideologia esposta*, Talia, the editor of a *Saggio di Estetica*, Germani Simoni, and some unsuccessful commentators upon Beccaria, the *Collezione de' classici Metafisici* (Pavia, 1819—22) was, perhaps, the best production in this department. De' Simoni has treated of natural law. Numerous explanations and editions have appeared of the Austrian code, which is possessed of legal authority in some of the states that speak Italian. It is worthy of mention, that Llorente's History of the Inquisition, and Sismondi's History of the Italian Republics of the Middle Ages, may be freely sold in the Italian states, while they are strictly prohibited by the neighboring states.

Italian Poetry. Italian poetry sprang from the Provençal, which was the first to flourish in Europe on the revival of civilization, and which was also communicated to Italy. Until the 13th century, we find in Italy only the poetry of chivalry by the Provençals and Troubadours. These wandering bards, intelligible to the Italians, and particularly to the Lombards, by the affinity of their sister language, traversed Italy, and were welcome guests at the courts, especially of the nobles of Lombardy, at a time when poetry was considered as indispensable at feasts. An instance of the estimation in which Troubadours (q. v.) were held, as the chief ornaments of a princely court, is found in the visit of Raimondo Berlinghieri, count of Barcelona and Provence, to Frederic Barbarossa, the German emperor, at Turin, in 1162, attended by a train of Provençal poets. The emperor was so delighted with their *gaya ciencia*, that he not only made munificent presents to the minstrels, but also composed a madrigal in their language himself. At the court of Azzo VII of Este, at Ferrara (1215 to 1264), some distinguished Provençals—Rinaldo di Vacheiras, Raimondo d'Artes, Americo di Reguilain—resided, and sang the praises of his daughters, Costanza and Beatrice. Here also flourished Maestro Ferrari, a native of that city, who, as well as many other Italians (Al-

berto Quaglio, Percivalle Doria, Alberto de' Marchesi Malaspina, &c.), sang in the Provençal language. No one acquired so great a reputation as Sordello of Mantua, who visited Provence for the purpose of making himself familiar with the language and poetry of the country. Only a few fragments of these Italian Troubadours are extant; but the first attempts to compose in the Italian language are not to be looked for in Lombardy, where the vicinity to Provence did not allow a taste for native poetry to spring up. Besides, the Italian of Lombardy was the least agreeable to the ear. The Genoese and Venetians were too much occupied with commerce; the Florentines, disturbed by domestic factions, were ignorant of the spirit of chivalry, and the popes were absorbed in theology and the canon law, and strangers to the spirit of poetry. In Sicily only could Italian poetry develop itself, because the Sicilians, always a poetical people, spoke a dialect sufficiently soft to afford the means of graceful verse. Neither commerce nor scholastic disputes occupied their thoughts, and their beautiful climate invited them to repose, and to fill the moments of leisure with poetry. They could not draw the poets of Provence to their country so easily as the Lombards, nor could they themselves so easily visit that country of love and poetry; but enough of the Provençal songs reached them, to awaken them to similar attempts in their own language. They had also a court rich in every knightly and noble accomplishment. Frederic II, the German emperor, resided, for a time, in Palermo (from 1198 to 1212)—he who crowned a poet with his own hand, to whose court, as the old novelist relates, thronged Troubadours, musicians, orators, artists, champions, and all persons of any kind of skill, from all countries, because of his munificence and his courtesy, whose noble character is praised by Dante; but, not satisfied with hearing the verses of others, Frederic and his court composed poetry themselves, and productions of his, of his natural son Enzo, and his celebrated chancellor, Pietro delle Vigne, are still extant. One of the most distinguished Sicilian poets of that time was Ciullo d'Alcamo, of whom we possess a song entirely Provençal in form and character. We have also the names and fragments of Jacopo da Lentino, surnamed *il Notajo*, of Guido, and Oddo delle Colonne, Ranieri, Ruggieri and Inghilfredi of Palermo, of Arrigo Testa, Stefano, prothonotary of Messina, and

Monna Nina, who come down to the period of Dante, and were the cause that every thing composed in Italian was then called *Sicilian*. After the year 1300, Sicily gave no farther models to Italy; but the real founders of Italian poetry appear in Bologna, Florence, and other cities of Tuscany. The oldest known to us is, perhaps, Folcacchiero de' Folcacchieri, but the most important is Guido Guinicelli of Bologna. A number of poets appeared in Tuscany, whose names Crescimbeni enumerates, and of whom he gives specimens. In the 13th century, Guittone d'Arezzo (author of a book of poems and 40 letters, interspersed with verses), Brunetto Latini (author of two poetical works—*il Tesoretto* and *il Pataffio*), Guido Cavalcanti (author of a celebrated *canzone* and other poems), Ugolino Ubaldini (author of an excellent idyl in the form of irregular *canzoni*), and Dante of Majano (author of a book of poems), deserve mention; but we find hardly a poet of eminence in the other provinces. By the side of the amatory poets Jacopone da Todi stands alone as a sacred poet. The forms of the early Italian poetry are borrowed from Arnaut Daniel, and other Provençals, and are, for the most part, the same which, in a more perfect state, characterize the later Italian poetry, viz. *canzoni*, sonnets, ballads, and *sestine*. With the Sicilians, we already find the *ottave* also. Its character is, even at this early period, decidedly marked. Its ruling spirit is love—an idealizing love, to which the spirit of Christianity contributed the tendency to adore and attribute perfection to the beloved object. Whether the new character which appears in all the productions of this time had its origin, as some maintain, in the spirit of Christianity, or only in certain feelings which sprang up at this time, and naturally connected themselves with Christianity, at least in appearance, we shall not here venture to decide, and refer the reader to the article *Chivalry*. It is certain that the modern spirit is essentially different from the ancient. (See *Classical*.) After this preparatory period of Italian poetry was passed, appeared the great Florentine, Dante Alighieri (born 1265). He left at once the trodden path, and stands without predecessor or follower among all the great names which ornament Italy. We do not speak of the form of his *Divina Commedia*, which, from its nature, could not but be unique, but of the peculiarity of his genius; but even his great poem, in which, as he says, heaven and earth assisted, and

which cost the poet the study of years, is connected with love, his Beatrice being his guide in the highest spheres of heaven; and we should greatly misconceive the poet and his age, if we should suppose that this circumstance was merely intended to commemorate his early passion. The spirit of the age unavoidably led him to exhibit love as the great mover of the human soul. (See *Dante*.) As Dante's production is important in the history of the human mind and the progress of civilization, it is of equal importance in the history of Italian literature. Dante made the Italian dialect the lawful currency of literature. His intention to write his poem in Latin hexameters sufficiently shows in what a state he found the Italian language; how little the light play of graceful rhymes had developed it for his great object. Hence his apology for attempting so serious a subject in the *lingua volgare*. The enthusiasm for Dante's poem was so great, that in Florence, Bologna and Pisa, professorships were early established for the explanation of his *Commedia*. In Florence, Boccaccio was the first who filled this chair. Of the commentators we shall mention, besides the later Landino, only Dante's own sons, Pietro and Jacopo, with Benvenuto of Imola and Martino Paolo Nidobeato. The archbishop of Milan, Giovanni Visconti, appointed two theologians, two philosophers, and two juriconsults of Florence, to undertake jointly the interpretation of the theology, philosophy and jurisprudence of Dante. Besides Dante, there flourished several other poets, among whom Cino da Pistoia (q. v.) is the most distinguished. He excelled in tender love poems, in which he celebrated his mistress Selvaggia, and was the precursor of Petrarca, for whom he also prepared the language. Cecco d'Ascoli, also a contemporary of Dante, wrote a didactic poem, in five books, on physics, morals and religion, under the title *Aerba* (properly *Aerbo* or *Aervo*). Francesco da Barberino composed his *Documenti d'Amore*, in which he treats of virtue and its rewards, in rude and irregular verses, and his other poem, *Del Reggimento e de' Costumi delle Donne*, also a moral and didactic poem. Fazio degli Uberti wrote, at the same period, his *Dittamondo*—a system of astronomy and geography in verse, in which Dante served him as a model. Without dwelling on the less important lyrical poets, Benuccio Salimbeni, Bindo Bonichi, Antonio da Ferrara, Francesco degli Albizzi,

Sennuccio del Bene, a friend of Petrarca, we come immediately to the latter. (See *Petrarca*.) His love did not, like Dante's, inspire the idea of one great poem, treating of all the acts and efforts of man, and his religious conceptions were still more strongly the ideal of love. His sonnets and *canzoni* are very differently esteemed; but if they appear to many readers of our age frequently overstrained, and sometimes devoid of the spirit and fullness of genuine poetry, to others they are a model of lyrical excellence; and his influence on the language of Italian poetry has been very great, rendering it softer and more flexible than Dante had left it. Petrarca was an excellent scholar, and well acquainted with Roman elegance, and he elevated his language to the greatest purity, beauty and melody. His followers are innumerable. Among them, in the 14th century, are the two Buonaccorsi da Montemagno, and Franco Sacchetti, the writer of *novelle*. The glory which Petrarca had acquired in a species of poetry easy in itself, and so consonant with the taste which his nation has preserved even to the present time, and to the spirit of the age, was too enticing; but the Petrarchists forgot that it is the spirit of their master which gained him his fame, and not merely the harmonious sound of his musical rhymes; and they poured forth innumerable poems, a comparison of which with those of Petrarca could only raise him still higher. Petrarca not only wrote lyrical poems, but, in his *capitoli*, or triumphs, approaches the didactic. He composed also Latin poems, eclogues, and an epic, *Africa*, celebrating his favorite hero, Scipio, the latter of which obtained him the poetic laurel, in the capitol, in Rome, and which—so easily do great poets mistake their own merits—he himself valued most, whilst he considered his lyrical poems of little value, and in his old age wished that he had not written them. Not less famous than Petrarca is his friend Boccaccio. (See the article *Boccaccio* for an account of his great service in the formation of Italian prose.) The satirical sonnets of Pucci, the didactic essay on agriculture by the Bolognese Paganino Bonafede, and the Four Kingdoms of Love, Satan, Vice and Virtue, by his countryman Federigo Frezzi, under the title *Quadriregno*, an unsuccessful imitation of Dante, belong also to this period. In the 15th century, Giusto de' Conti first meets us—an imitator of Petrarca. In his sonnets he celebrates the beautiful hand of his mistress, on which

account the whole collection is called *La Bella Mano*. About 1413, the barber Burchiello, at Florence, acquired no little reputation by his peculiar, but, for us, unintelligible sonnets. The attempt of the painter and architect, Leon Battista Alberti (somewhat later, under Cosmo de' Medici), to compose hexameters and pentameters in Italian, is worthy of mention. Lorenzo de' Medici, after the death of his grandfather (1464), the Pericles of the Florentine republic, was inspired by his passion for Lucretia Donati, a noble Florentine lady, to imitate Petrarca; yet he did it with independence. He was the pupil of the Platonist Marsiglio Ficino. Besides sonnets and canzoni, we have *capitoli*, stanzas, *terzine*, and carnival songs, by him. His *Symposium*, or the Drinkers (*Beoni*), a sportive imitation of Dante, describes three journeys into a wine cellar. The most distinguished of the contemporaneous poets was Angelo Ambrogini, called *Poltiziano*, from the small village Montepulciano, who is celebrated also as a scholar and philosopher. Besides a dramatic poem, *Orfeo*, there is a fragment by him, in beautiful stanzas, in praise of Julian of Medici, on occasion of a tournament, exhibited by the brothers, at Florence. A friend of his was the graceful amatory poet Girolamo Benivieni. Of the three brothers Pulci, Bernardo wrote two elegies, a poem on the passion of Christ, and was the first who translated the eclogues of Virgil into Italian. Luca was the author of the *Heroïdes*, a poem in *ottave rime*, in which he celebrated, earlier, but not less beautifully than Poliziano, a tournament of Lorenzo of Medici, a pastoral, also in *ottave rime*, entitled *Driadeo d'Amore*, and an epic poem of chivalry, *Ciriffo Calvaneo*, which in itself is of little value, and was left incomplete (Bernardo Giambullari finished it after the death of the poet), but which is remarkable as the commencement of those ironical and serious poems of chivalry, which, with the decline of chivalry and the poetry of the middle ages, became natural, and, we might almost say, necessary to the poetical spirit of the Italians. Luigi, the most celebrated of the three, owes his fame not to the whimsical sonnets in which he and his friend, Matteo Franco, held each other up to the laughter of Lorenzo and his guests (often in the most indecent language), nor to his *Beca da Dicomano*, &c., but to his *Morgante Maggiore*, by which he became the predecessor of Ariosto, who, however, surpassed him as much as he himself

surpassed the first rude attempts of the 14th and 15th centuries in this department, of which the *Buovo d'Antona*, *La Spagna Historiata*, and *La Regina Ancroya*, are the most known. The *Membriano* of Francesco Cieco da Ferrara, which is not unworthy to stand by the side of the *Morgante*, served to amuse the Gonzaga, at Mantua; but a more immediate predecessor of Ariosto was Matteo Maria Boiardo, author of the *Orlando Innamorato*, which at first was not much relished by the Italians, on account of its gravity, as they had already become too fond of irony in these epics of chivalry; so much so, that Boiardo, continued by Niccolò degli Agostini, was entirely re-cast by Domenichi, and, at a later period, by Berni. Contemporary with these epic poets were the satirist Bern. Bellicioni, and numberless Petrarchists, as Francesco Cei, Gasparo Visconti, Agostino Staccoli d'Urbino, Serafino d'Aquila, Antonio Tebaldeo, Bernardo Accolti, a celebrated improvisatore, who assumed the modest surname *L'Unico*, a Neapolitan under the name of *Noiturno*, a Florentine, Cristoforo, under the name of *L'Altissimo*, &c. Antonio Fregoso, surnamed *Fileremo*, wrote a moral erotic poem, *La Cerva Bianca*, of moderate value, with *Selve*, and gay and melancholy *capitoli*. Gian Filoteo Achilini deserves to be mentioned, on account of his scientific-moral poems, *Il Viridario* and *Il Fedele*, and Cornazzano dal Vorsetti, for his poem on the art of war, entitled *De Re Militari*. Distinguished as female poets of this century are Battista Montefeltro, wife of Galeazzo Malaspina, her niece Constanza, Bianca of Este, Danigella Trivulzi, Cassandra Fedele, and the two Isottas. The 16th century, the period of Italian poetry, in which the princes of Italy, and particularly the popes, extended the most munificent patronage to poetry and the arts, begins with the *Orlando* and other poems of the admirable Ariosto. (q. v.) Giovanni Giorgio Trissino (q. v.) attempted, without success, the serious epic. His work is dry and cold. Giovanni Ruccellai displays much tenderness and feeling in his didactic poem *Le Api*. Luigi Alamanni (q. v.), author of a didactic poem on agriculture (*La Coltivazione*), a romantic epic, *Girone il Cortese*, and *Avarchide* (a modern Iliad, on the whole a failure), belongs rather to poets of the second rank. Sannazzaro distinguished himself in his *Arcadia*, and in his lyric poems, by delicacy of feeling and beauty of expression. Berni (q. v.) became the creator of a new department. Among the Petrarch-

ists of this age are Bembo, Castiglione and Molza. Lodovico Domenichi published, in 1559, the poems of 50 noble ladies. Among these was Vittoria Colonna, wife of Fernando d'Avalo, marquis of Pescara. (Respecting Aretino, equally known for genius and licentiousness, see *Aretino*.) Bernardo Tasso, in his epic, and still more in his lyric poems, appears as an excellent poet, but was surpassed by his son Torquato Tasso. (See *Tasso*.) Guarini displays much grace in his lyrics (madrigals and sonnets), but he owes his fame to his *Pastor Fido*. Gabriello Chiabrera was distinguished as a lyric poet. He also wrote several epic poems and pastoral dramas. The learned father Bernardino Baldi published, besides sonnets and *canzoni*, a hundred apologues in prose. Attempts had already been made in the Æsopic fable by Cesare Pavesi, under the name of *Targa*, and by Giammaria Verdizotti, but with less success. Teofilo Folengi, more known under the name of *Merlin Coccajo*, must be mentioned as the inventor of macaronic poetry. As early as the second half of the 16th century, the corruption of taste had begun, and continually increased, so that the 17th century produced but very few works which can be considered as exceptions. We should mention, however, Marino (q. v.), who, as it were, founded his own school, from which proceeded Claudio Achillini, Girolamo Preti, Casoni and Antonio Bruni, who were his most ardent admirers. Alessandro Tassoni is known as the author of *La Secchia Rapita*, a comic and satiric epic. Francesco Bracciolini, who had imitated Tasso, in his *Croce Racquistato*, with no great success, by his *Scherno degli Dei*, disputed with Tassoni the honor of the invention of the mock-heroic, but does not equal him in grace and ingenuity. Two later mock-heroic poems—*Il Malmantile Racquistato*, by Lorenzo Lippi, and *Il Torracchione Desolato*, by Paolo Minucci—have no other merit than the purity of their Tuscan language. The works of Carlo de' Dottori, Bartolommeo Bocchini, Cesari Caporali, are not of distinguished merit. Filicaia's lyrical poems glow with patriotic feeling, and a noble elevation, which will always render him popular. Count Fulvio Testi was the Horace of his nation, but his epic productions were mere fragments. The caustic satires of the painter Salvator Rosa are not to be passed over in silence, amidst the general barrenness of Italian poetry, about the middle of the 17th century. The residence of Christina, queen of

Sweden, in Rome, and her predilection for the classic muse, served to banish from the circle of poets, who assembled around her, the Marinistic exaggeration, and to substitute for it a frigid correctness. Her conversion to the Catholic faith also attracted more attention to sacred poetry than it had previously received in Italy; but no poet of her circle merits particular notice. Deserving of mention is Niccolò Forteguerra, author of the *Ricciardetto*, the last epic of chivalry. Nolli, whose songs and odes were popular, translated Milton's *Paradise Lost*, and was the first who made his countrymen acquainted with English literature, whilst, at the same time, the French taste began to prevail, which exercised a decided influence, particularly on the dramatic literature of Italy. Fewer candidates now appear on the Italian Parnassus. The abbate Carlo Innocenzio Frugoni, among other poetical productions (mostly frigid occasional pieces), composed sonnets and *canzoni*, of which the sportive ones are praised. There is a successful translation of the Psalms by Mattei. The *Arte Rappresentativa* (the Histrionic Art) is a didactic poem worthy of mention, by Lodovico Riccoboni, who raised the character of the Italian theatre at Paris. Francesco Algarotti, the companion of Frederic the Great, belonging to the French school, in his odes, poetic epistles and translations, exhibited the pleasing ease, but, at the same time, the coldness of the French. Roberti and Pignotti wrote Æsopic fables with originality and elegance. Twenty poets were united in the composition of a comic poem, under the title *Bertoldo, Bertoldino and Cacasenno*. Luigi Savioli sung of love in the style of Anacreon. As erotic and lyric poets, must be mentioned with him Gherardo de' Rossi and Giovanni Fantoni, called, among the Arcadians (see *Arcadia*), *Labindo*. A pleasing enthusiasm pervades the poetry of Ippolito Pindemonti; and, among the productions of his friend Aurelio Bertola of Rimini, the fables rank the highest. Clem. Bondi is pleasing, but without creative power. Giuseppe Parini, who imitated Pope's Rape of the Lock, displays true poetic elevation and fine feeling. Onofrio Menzoni, who is not without poetic originality, confined himself almost entirely to sacred poems. Alfieri was distinguished for his satires, lyric poems, his *Etruria Vendicata*, and his dramatic compositions, translations, &c. (See *Alfieri*.) The abbate Giambattista Casti was distinguished for

elegance, wit and humor. His *Animali Parlanti*, a mock-heroic poem, is rich in satiric and humorous traits. His *Novelle Galanti* are often indecent. The late Vincenzo Monti is pronounced unanimously to have been the greatest among the recent poets of Italy. Besides his dramatic compositions, his most celebrated poem is his *Bassvigliana*, in which he imitates Dante. But who can enumerate the host which now lays claim to the poetic laurel, particularly since the souvenirs flourish in Italy also, and offer so fine a field for sonnets, of which there is hardly an educated Italian who has not composed some? The grave character which the times are assuming will perhaps put an end to these elegant trifles, whose abundance cannot be considered favorable to an elevated tone, either in literature or the fine arts. The souvenirs have already declined in Germany, where they originated. The latest epic attempts have not been successful. The *Iliade* and *S. Benedetto*, by A. M. Ricci, *Mosè*, by Robiola, the *Moabide*, by Franchi di Pont, were inferior to the specimens which have appeared of Palomba's *Medoro Coronato*. More interest has been excited by the tragedies, the authors of which, however, are restrained by their party views of the romantic and classical. Fabbri of Cesena, Marsuzi, the duke of Vendignano, follow the example of Alfieri, respecting whose poetical system, see the article *Alfieri*. Ugo Foscolo's *Ricciarda* (Londra, i. e. Turin, 1820) was intended to introduce a taste for the romantic style into Italy; but it is already forgotten. Manzoni, a cultivator of this kind of poetry, or of what the Italians understand by this name, has been more successful. Göthe praised Manzoni's *Conte di Carmagnola* (Milan, 1820) highly. Pindemonti, Maffei and Nicolini, however, are placed higher than Manzoni by all parties. The productions in the comic department are poor; they appear, at least to other nations, heavy and dragging, and the *Commedia dell'Arte* (see *Drama*) is not considered worthy of notice by the high classes; yet its strong humor might perhaps please an unprejudiced mind more than the writings of Nota, Giraud and Ponzadoro. Barbieri's *Nuova Raccolta Teatrale, ossia Repertorio ad Uso de' Teatri Italiani* (Milan, 1820), and Marchisio's *Opera Teatrale* (Milan, 1820), endeavor to supply the want of native productions by translations of French and German works—proof enough that the natural gayety of the south, formerly the home of pleasure, is departing. How can it be

otherwise under the Austrian sceptre? Our limits do not permit us to mention the writers of sonnets and operas. Trite subjects are brought up under forms a thousand times repeated, and thus the miracle, that Sgrizzi can astonish his audience with improvisated tragedies is partly explained. (See *Improvvisatori*.) The treasure of the *novelle*, of which Shakespeare so happily made use, lies before the Italian poets, untouched, and seems even to be little known to the Italian public at large. Theatres like those of S. Carlo at Naples, Della Scala at Milan, Pergola at Florence, where whole regiments might appear on the stage, do not afford much reason to hope for the restoration of dramatic excellence. The historical novel, which sir Walter Scott has rendered so popular with all nations, has been attempted in Italy, as in Livati's *Viaggi di Fr. Petrarca* (Milan, 1820), Grossi's *Ildegonde*, Manzoni's *Promessi Sposi*, and the *Monaca di Monza*. The history of Italian poetry, particularly of the older periods, is to be found in the works of Crescimbeni, Quadrio, Tiraboschi, and also in Ginguené's *Histoire Littéraire d'Italie*, Sismondi's work *De la Littérature du Midi*, and in Bouterwek (q. v.), the two last of which works come down to our own times.

Italian Theatre. The political state of Italy, and the easy, careless life of the people, in their mild and beautiful climate, have coöperated in causing the dramatic literature of Italy to remain in a very backward state. It was revived, as has been shown in the article *Drama*, earlier among the Italians than among other nations, because they had the model of the ancient drama before their eyes; but this very circumstance was one reason why a national drama was not formed in Italy. The modern Italian, generally speaking, has not that reflecting turn of mind, which is necessary for the composition and enjoyment of a truly good drama; nor has sufficient liberty existed for centuries in Italy to afford a fair field for dramatic talent. If it be objected that the Spanish drama attained its perfection under the stern sway of an absolute government, it may be answered, that the higher drama, with the Spaniards, is of a religious cast—a consequence of that religious gloom which belongs to the Spanish character, but which the gay Italian does not feel. The extemporaneous mask, which is such a favorite with the lower classes of Italy, is contemned for this very reason by the higher classes; and whilst the people in general

relish nothing but the *commedia dell' arte* (see *Drama*), the higher classes care only for the opera. The *drama*, therefore, properly so called, does not appear like a natural part of Italian literature, and we trust it will not be considered an arbitrary division, if we treat the Italian drama separately from the body of Italian literature. The dramatic writers of this country started with so close an imitation of the ancients, that no Italian, down to the last quarter of the 15th century, wrote a tragedy in any language except Latin; and the *Orfeo* of Angelo Poliziano, of that time, is a series of lyrical poems dramatically attached to each other—a tragedy merely in name. The *Sofonisbe* of Trissino imitates in every point the ancient model, even to retaining the chorus; it is not without merit, but, on the whole, is a pedantic work; yet, in the time of Leo X, in 1516, it was received with so much applause, as to be represented in Rome with great pomp. Ruccellai (1525) bears the same marks of imitation and want of poetical invention; even Tasso's *Torrismondo* (about 1595), though particular passages remind us of his immortal poems, is stamped with the same character. Amidst the minute and anxious observance of the rules of Aristotle, closely followed by many Italian writers of tragedies not worthy of mention, count Prospero Buonacelli deserves credit for venturing to omit the chorus; on the other hand, the lawyer Vincenzo Gravina once more attempted to show that imitation of Seneca was the only way to tragic perfection. After Mortello, in the beginning of the 18th century, had finally attempted to improve the Italian drama by the imitation of Racine and Corneille (he even endeavored to introduce the French Alexandrine), Maffei, in his *Merope*, aimed at a middle course, and, without imitating either, to unite the excellences of Seneca and of the French theatre. In this absence of real tragedies, the serious operas, the musical dramas of Metastasio (born 1698), may be properly mentioned. Their tone had been settled by the attempts of Apostolo Zeno. Without marked character or free play of imagination, they always preserve the decorum of the French theatre; but in elegance and melody of language, and in musical softness of expression for the common places of passion, particularly of love, they are unrivalled. Alfieri, who wrote towards the end of the last century, is, throughout his writings, a contrast to Metastasio. (See *Alfieri*.) He does not satisfy a German or an English-

man in his conception of dramatic excellence. Among his followers are Vincenzo Monti of Ferrara, Alessandro Pelopi of Bologna, and particularly Giambattista Niccolini of Florence, whose *Polyxena* received a prize in 1811. The pastoral dramas of Tasso and Guarini, viz. the *Aminta* of the former, and the *Pastor Fido* of the latter, form a novel kind of dramatic poetry. They entirely eclipsed those of Niccolò of Coreggio, Agostino Beccari, Cinthio Giraldi, Agostino Argenti and Buonarelli. Tasso succeeded in uniting the sweetest tones of Theocritus, Anacreon, and of the eclogues of Virgil, without injuring his originality. In comedy, the Italians also began with a close imitation of the ancients, not, however, of the comedy of Aristophanes, but of the Romans, Plautus and the calm Terence. These productions were called, in contradistinction from the extemporaneous comedy, *commedie erudite* (learned comedies). The comedies of Ariosto and the *Clizia* of Machiavelli exhibit this imitation. The other comedies of the latter are altogether Florentine in their character, but we must admit that they are deficient in that elevated tone of comedy, which we admire in Shakspeare. We mention Tasso's *Gli Intrighi d'Amore* only on account of the author's name. The *Tancia*, by the younger Michael Angelo Buonarroti (1626), is one of the most remarkable Italian comedies, on account of the Florentine nationality so well portrayed in it. Goldoni endeavored to put an end to the *commedia dell' arte*, by his grave moralizing comedies. On the other hand, Gozzi strove to save the extemporaneous comedy, by elevating its character. In comedies, the subjects of which were taken from fairy tales, and in tragi-comedies, the materials of which were from Calderon and Moreto, without, however, having their poetical execution or genius, he only wrote the chief parts, and these in very easy verse. In the less important parts, which were intended for the standing masks, he was satisfied with indicating merely the leading ideas, leaving the execution to the talent of the actor. He remained without a follower. Among the latest writers of comedies, we may mention Albergati, whose *Prisoner* received a prize at Parma, and who wrote a number of agreeable farces; the Venetian Francesco Antonio Avelloni, surnamed *il Poetino*, an imitator of the French; Antonio Simone Sograsi; the Neapolitan Gualzetti; the abbate Chiari; the Piedmontese Camillo Federici; the Roman Gherardo de' Rossi;

count Giraud; Giovanni Pindemonti, &c. (See *Italian Poetry*.) Augustus William von Schlegel says (vol. ii, p. 68, of his *Dramatische Vorlesungen*), "We think it is not saying too much to assert, that dramatic poetry, as well as the histrionic art, is in the lowest state in Italy. The foundation of a national theatre has never yet been laid, and, without a total reform in principles, there is no prospect that it ever will be."

Italian Art. The art of painting was early introduced both into Italy and Germany by Greek masters; but the diversities of national character, climate and religion, produced different results in the two countries. A glowing imagination, an easy life, an innate sense for the beautiful, enthusiastic piety, the constant sight of nature in her fairest forms, and the contemplation of the masterpieces of ancient art, occasioned painting, in Italy, to unfold with great magnificence; while, in Germany, the ancient painters loved rather to dwell on the inward life and character. They were poets and philosophers, who selected colors instead of words. The Italians have therefore remained inimitable in the ideal of this art, as the Greeks in statuary. The 12th century is generally taken as the period of the beginning of the history of painting in Italy; but, even before that time, it had been the scene of the labors of Greek and Byzantine artists. During the pontificate of Leo the Great, in the year 441, a large picture in mosaic was executed in the Basilica of St. Paul, on the road to Ostia, and the portraits of the 42 first bishops, which are seen in the same church, date their origin from the same time. Mosaic and encaustic painting was then the prevalent mode. Painting in distemper was afterwards introduced. About the end of the sixth century, there were many paintings, which were not believed to be the work of mortal hands, but were attributed to angels or blessed spirits. To this class belongs one of the most famous representations of the Savior, in wood, at Rome, called *Acheiropoieta*, of which a sight can be obtained only with difficulty, in the *sanctum sanctorum*. Whether the evangelist Luke, whom painters afterwards chose for their patron saint, was himself a painter, has been the subject of much controversy. In Rome, especially, the *madonnas* in Sta. Maria Maggiore, Sta. Maria del Popolo, Sta. Maria in Araceli, and the one in the neighboring *Grotta Ferrata*, have been ascribed to the pencil of the evangelist. In the 8th century,

painting on glass, mosaic on a ground of gold, and painting in enamel, were zealously prosecuted in Italy. There were already many native artists. One of the oldest monuments of art is the celebrated Christ on the Cross, in the Trinity church at Florence, which existed there as early as 1003. About 1200, a Greek artist, Theophanes, founded a school of painting in Venice. The genuine Italian style first bloomed, however, in Florence, and may be treated under three leading periods: 1. from Cimabue to Raphael; 2. from Raphael to the Caracci; 3. from the Caracci to the present time.

First Period. The art was first pursued with zeal in Pisa. Giunta Pisano, Guido of Sienna, Andr. Tafi and Buffalmacco precede Cimabue, who was born at Florence, in 1240. This artist, who was regarded as a prodigy by his contemporaries, first introduced more correct proportions, and gave his figures more life and expression. His scholar Giotto excelled him even in these respects, and exhibited a grace hitherto unknown. He was the friend of Dante and Petrarch, and practised, with equal success, historical painting, mosaic, sculpture, architecture, and portrait and miniature painting. He first attempted foreshortening and a natural disposition of drapery, but his style, nevertheless, remained dry and stiff. Boniface VIII invited him to Rome, where he painted the still celebrated Navicella. He was followed by Gaddi, Stefani, Maso and Simone Memmi, who painted the celebrated portraits of Petrarch and Laura. But Masaccio first dispelled the darkness of the middle ages, and a brighter dawn illumined the art. The Florentine republic, in the beginning of the 15th century, had attained the summit of its splendor. Cosmo of Medici patronized all the arts and sciences; Brunelleschi then built the dome of the cathedral; Lorenzo Ghiberti cast the famous doors of the baptistry in bronze; and Donatello was to statuary what Masaccio was to painting. Masaccio's real name was Tommaso Guidi. He was born at St. Giovanni, in Val d'Arno, in the year 1402. His paintings have keeping, character and spirit. His scholars first began to paint in oil, but only upon wooden tablets or upon walls, coated with plaster of Paris. Cavnass was not used till long after. Paolo Uccelli laid the foundation for the study of perspective. Luca Signorelli, who first studied anatomy, and Domenico Ghirlandaio, who combined noble forms and expression with a knowledge of perspective, and abolished the ex-

cessive use of gilding, were distinguished in their profession. The elevated mind of Leonardo da Vinci (see *Vinci*), who was born in 1444, and died 1519, and who was a master in all the arts and sciences, infused so much philosophy and feeling into the art, that, by his instrumentality, it quickly reached maturity. From him the Florentine school acquired that grave, contemplative and almost melancholy character, to which it originally leaned, and which it afterwards united with the boldness and gigantic energy of Michael Angelo. The Roman school already enumerated among its founders the miniature painter Oderigi, who died in 1300. He embellished manuscripts with small figures. Guido Palmerucci, Pietro Cavallini and Gentile da Fabriano were his most distinguished successors. Almost all the painters of this time were accustomed to annex inscriptions to their pictures: the annunciation to the virgin Mary was their favorite subject. Perugia was the principal seat of the Roman school. As early as the 13th century, there was a society of painters there. Pietro Vanucci, called *Perugino* (who was born 1446, died 1524), first introduced more grace and nobler forms into this school, whose character acquired from him something intellectual, noble, simply pious and natural, which always remained peculiar to the Roman school. Perugino's great scholar, Raphael, soon surpassed all former masters, and banished their poverty, stiffness and dryness of style. Taste came into Venice from the East. Andr. Murano and Vittore Carpaccio are among the earliest artists of that city. Giovanni and Gentile Bellino are the most distinguished painters of the earlier Venetian school. The former was born 1424, and died 1514. The latter labored some time in Constantinople under the reign of Mohammed II. They introduced the glowing colors of the East; their style was simple and pure, without rising to the ideal. Andr. Mantegna (born at Padua, in 1431, died 1506) was the first to study the ancient models. Padua was the principal seat of the Venetian school. Mantegna afterwards transferred it to Mantua, and his style formed the transition to the Lombard school. Schools of painting flourished in Verona, Bassano and Brescia. Giovanni of Udine (who was so distinguished by his faithful imitation of nature in secondary things, that he painted for Raphael the garlands around his pictures in the Farnesina), Pellegrino and Pordenone, were the most able predecessors of the two great masters of the

Venetian school, Giorgione and Titian. No capital city served as the central point of the Lombard school: Bologna subsequently became the centre. Imola, Conto, Ferrara, Modena, Reggio, Parma, Mantua and Milan were afterwards considered the seats of this school. Galasio, who lived about 1220, Alighieri, Alghisi, Cosimo Tura, Ercole Grandi, and especially Dosso Dossi (born 1479, died 1560), were the principal painters of Ferrara. The last, a friend of Ariosto, possesses a remarkable grandeur of style, united with a richness of coloring which may bear comparison with that of Titian. Bramante (born 1444, died 1514), who was likewise a great architect, Lippo Dalmasi, and especially Francesco Raibolini (born 1450), called *Francesco Francia*, were highly distinguished among the Bolognese masters. The latter, who was marked by a tender religious expression and uncommon industry, had the greatest veneration for Raphael. It is asserted that, at the sight of the St. Cecilia of this master, he was so struck with the impossibility of attaining the same perfection, that he fell into a deep melancholy, and soon after died. Here also belongs the charming Innocenzo da Imola. But all these were far surpassed by the incomparable Antonio Allegri da Correggio, who, in fact, first founded the character of the Lombard school, so distinguished for harmony of colors, expression replete with feeling, and genuine grace.

Second Period. We now come to the greatest masters of any age, who, almost at the same time, as heads of the four schools, carried every branch of the art to the highest perfection. In Italy, they and their scholars are called *Cinquecentisti*, from the century in which they flourished. This period of perfection passed away rapidly, and soon required the violent restoration, with which the third period commences. After Leonardo da Vinci, in the Florentine school, had settled the proportions of figures, and the rules of perspective and of light and shade, and his scholars, Luini (who united Raphael's style with that of his master), Salaino and Melzo, besides the admirable Baccio della Porta, who is famous under the name of *Fra Bartolommeo* (born 1469), and whose works are distinguished for elevated conception, warmth of devotion and glowing colors, had done much for the art, and after the gentle and feeling Andrea del Sarto (born 1488, died 1530), the intellectual Balthasar Peruzzi and the gay Razzi had made this school distinguished, arose

the most extraordinary of all masters, Michael Angelo Buonarroti (born 1474, died 1564). His gigantic mind grasped, with equal power, statuary, architecture and painting. His fire of composition, his knowledge of anatomy, the boldness of his attitudes and foreshortenings, leave him without a rival; but, as a model, he was detrimental to the art, because his imitators necessarily fell into exaggeration and contempt of a simple style. In grandeur, his fresco painting, the Last Judgment, in the Sistine chapel at Rome, is inimitable. Beauty was never so much his object, as power and sublimity; especially since, in the former, he could never equal Raphael, but in the latter stood alone. Dante was his favorite poet. In his later years, the erection of St. Peter's church almost entirely engrossed his thoughts. Rosso de' Rossi, Daniel of Volterra, Salviati, Angelo Bronzino, Alessandro Allori, and many others, were his scholars and imitators. In 1580, Ludov. Cigoli and Greg. Paganì began to awaken a new spirit. They returned to nature, and sought to create a better taste in the *chiaro oscuro*. Domenico Passignani, Cristoforo Allori and Comodi were their followers. If we turn our attention to the Roman school, we find at its head the first of artists—Raphael Sanzio da Urbino (born 1483, died 1520). His genius showed itself as elevated in his fresco paintings, in the *stanze* and *loggie* of the Vatican (the former of which contain the School of Athens, the Parnassus and the Conflagration of the Borgo, while the latter contain scriptural scenes, from the creation through the whole Old Testament), as it appears lovely, spiritual and original in the frescos of the Farnesina (representing the life of Psyche). No less superior are his oil paintings, of which we shall only mention his *madonnas*, celebrated throughout the world, especially the *Madonna del Sisto* (in the Dresden gallery), the *Madonna della Sedia* (in Florence), *Madonna della Pesce* (in Madrid), *Maria Giardiniera* (in Paris), *Madonna di Foligno* (in Rome), his St. Cecilia (in Bologna), and his last work, the Transfiguration of Christ. His scholars and successors—the bold Giulio Romano (born 1492, died 1546), the more gloomy Franc. Penni il Fattore (born 1488, died 1528), the lofty Bartolommeo Raineghi, surnamed *Bagnacavallo*, Pierino del Vaga, Polidoro da Caravaggio, Gemigniani, Benvenuto Tisi, called *Garofolo*, and many others—were skilful masters; but they forsook the path of their great pattern, and degenerated into mannerism.

Federico Barocccio (born 1528, died 1612) endeavored to counteract this tendency. In spirit, he belonged to the Lombard school, as he aimed at the grace of Correggio. He possesses an uncommon degree of grace and expression. With his scholars Francesco Vanni, Pellegrini, and the brothers Zuccheri, he infused a new life into the Roman school, though the latter produced pleasing rather than great works, and fell into mannerism. Muziano was distinguished in landscape painting, and Nogari, Pulzone and Facchetti in portrait painting. At the head of the Venetian school, we find the two excellent colorists Giorgione Barbarelli di Castelfranco (born 1477, died 1511) and Tiziano Verelli (born 1477, died 1576). The portraits of the former are celebrated for their warmth and truth. The latter was great in all the departments of art, inimitable in the disposition of his carnations, excellent as a historical and portrait painter, and the first great landscape painter. Even in extreme old age, his powers were unimpaired. Ariosto and Aretino were friends of the gay, happy Titian. He executed many works for the Spanish kings. Some of his most famous works are the altar-piece of St. Pietro Martire, his pictures of Venus, his Bacchanal and his Children Playing, in Madrid, his *Cristo della Moneta*, &c. He first understood the art of painting with transparent colors. In groups, he selected the form of a bunch of grapes for a model. His successors—Sebastiano del Piombo, Palma Vecchio, Lorenzo Lotto, Paris Bordone, Pordenone—are distinguished, especially in coloring. Schiavone, whose *chiaro oscuro* and richness of color are truly remarkable; Giacomo da Ponto, called *Bassano*, who imitated reality, even in common things, to deception, and who was the head of a whole family of painters; the ardent, inspired Robusti, called *Il Tintoretto* (born 1512, died 1594), whom Titian, through jealousy, dismissed from his school; the fantastic, splendid Paul Veronese (born 1532, died 1588), who painted boldly and brilliantly with a free pencil, but neglected all propriety of costume, and frequently mingled masks in historical paintings, and the Veronese Cagliari, were ornaments of the Venetian school. It likewise degenerated, and its mannerists were worse than those of the other schools, because they did not study the antiques and the ideal. At the head of the Lombard school, we find the charming Antonio Allegri, called *Correggio* (born 1494, died 1534), whose works are full of feeling. (See *Correggio*.) His successors and

scholars were Francesco Rondani, Gatti, Lelio Orsi, and especially Francesco Mazzola il Parmegianino (born 1503, died 1540). This artist possessed much ease, fire, and a peculiar grace, which frequently borders on mannerism. Gaudenzio Ferrari, and many others, are the ornaments of the Milanese school. In landscape painting, Lavizzario was called the *Titian of Milan*. The famous Sofonisba Anguisciola (born 1530), of Cremona, was highly distinguished in music and painting. As an excellent portrait-painter, she was invited to Madrid, where she painted don Carlos and the whole royal family, and gave instruction to queen Elizabeth. Van Dyke declared that he had learned more from the conversation of this woman, when she was blind from age, than he had from the study of the masters. She died in 1620. Lavinia Fontana, Artemisia Gentileschi, Maria Robusti, and Elis. Sirani were celebrated female artists of this time. Camillo and Giulio Procaccio were distinguished for strength of imagination and excellent coloring. In Bologna, we find Bagnacavallo, a distinguished artist of this period, whom we have already mentioned as one of Raphael's scholars. He flourished about 1542. Francesco Primaticcio (born 1490, died 1570), Niccolò dell'Abbate, Pellegrino Tibaldi, Passarotti and Fontana were very able Bolognese artists.

Third Period. It begins with the age of the three Carracci. These excellent artists endeavored to restore a pure style, and, by the combined study of the ancient masters of nature and science, to give a new splendor to the degraded art. Their influence was powerful. The division into the four principal schools now ceases, and we find but two principal divisions—the followers of the Carracci, who are called *eclectics*, and the followers of Michael Angelo Caravaggio, who are called *naturalists*. Lodovico Carracci (born 1555, died 1619) was the uncle of the two brothers Agostino (born 1558, died 1601) and Annibale (born 1560, died 1609). Lodovico was quiet, contemplative, soft and serious. His passionate teachers, Fontana and Tintoretto, at first denied him any talent: he studied therefore more zealously, and acquired the deepest views as an artist. Agostino united uncommon sagacity and the most extensive knowledge with a noble character. His brother Annibale, who made extraordinary progress in the art, under Lodovico's direction, became jealous of Agostino. The disputes between the two brothers never ceased, and the offended Agostino devoted him-

self chiefly to the art of engraving. The attacks of their enemies first united them, and they founded together a great academy. The brothers were invited to Rome to paint the gallery of the duke of Farnese. They soon disagreed, and Agostino retired, and left the work to his fiery brother. Annibale completed the undertaking with honor, but was shamefully cheated of the greatest part of his pay. Deeply mortified, he sought to divert his mind by new labors and a journey to Naples; but the hostility which he there experienced, hastened his death. Meanwhile, the quiet Lodovico finished, with the aid of his scholars, one of the greatest works—the famous portico of St. Michael in Bosco, in Bologna, on which are represented seven fine paintings, from the legends of St. Benedict and St. Cecilia. The last of the labors of this great master was the Annunciation to Mary, represented in two colossal figures, in the cathedral of Bologna. The angel is clothed in a light dress, and, by an unhappy distribution of drapery, his right foot seems to stand where his left belongs, and *vice versa*. Near at hand, this is not observed; but, as soon as the large scaffold was removed, Ludovico saw the fault, which gave occasion to the bitterest criticisms from his enemies. The chagrin which he suffered on this occasion brought him to the grave. The scholars of the Carracci are numberless. The most famous endeavored to unite the grace of Correggio with the grandeur of the Roman masters. Cesare Aretusi was distinguished for the most faithful copies of Correggio and Guido Reni (born at Bologna, 1575, died 1642), especially for the ideal beauty of his heads, the loveliness of his infant figures, and the uncommon facility of his pencil. His fresco representing Aurora, in the palace Borghese, and his oil painting, the Ascension of Mary, in Munich, are well known. Francesco Albani (born 1578 at Bologna, died 1660) lived in constant rivalry with Guido. He produced many large church paintings, but was most celebrated for the indescribable charm with which he represented, on a smaller scale, lovely subjects from mythology, and especially groups of Cupids. His paintings in the Verospi gallery, and his Four Elements, which he painted for the Borghese family, gained him universal reputation. The background of his landscapes is excellent. All his works breathe serenity, pleasure and grace. The third great contemporary of those already mentioned, Domenico Zampieri, called *Domenichino* (born 1581, died

1641), was at first little esteemed by them, on account of his great modesty and timidity. Thrice were prizes awarded by Lodovico to drawings, the author of which no one could discover. At last Agostino made inquiries, and the young Domenichino timidly confessed that the drawings were his. His industry and perseverance rendered him the favorite of his master. His works evince the most thorough knowledge, and are rich in expression of character, in force and truth. His Communion of St. Jerome, his Martyrdom of St. Agnes, and his fresco in the Grotta Ferrata, are immortal masterpieces. He was always remarkable for his timidity. He was invited to Naples, but was there persecuted and tormented by the painters; and it is even suspected that he was poisoned. Giovanni Lanfranco (born at Parma, 1580, died 1647) was especially distinguished for the effect of his light. Bartol. Schidone is one of the best colorists of this school. The Bibienas, the Molas, Al. Tierini, Pietro di Cortona, Ciro Ferri also deserve mention. At the head of the naturalists, who, with a bold and often rash pencil, imitated nature, without selection, stands Michael Angelo Merigi, or Amerigi da Caravaggio (born 1569). His chief opponent in Rome was D'Arpino, who stood at the head of the idealists, or rather of the mannerists. Caravaggio and his successors, Manfredi, Leonello Spada, Guercino da Cento, &c., often took common nature for a model, which they servilely imitated, thus profaning the genuine dignity of the art, though they cannot be denied strength and genius. About this time, the beginning of the 17th century, the *bambocciate* were introduced. (See *Peter Laar*.) Many artists, especially Mich. Ang. Cerquozzi, surnamed *delle battaglie*, and *delle bambocciate*, followed this degenerate taste. Andrea Sacchi made great efforts to oppose him. His drawing was correct and grand; Raphael was his model. His most famous scholar was Carlo Maratto (born 1625, at Camerano), whose style was noble and tasteful. The cavaliere Pietro Liberi, Andrea Celesti, the female portrait painter Rosalba Carriera (born at Venice, 1675, died 1757), who was distinguished for her drawings in pastel, the graceful Francesco Trevisani, Pinzetta Tiepolo, and Canaletto, a painter in perspective, were the most celebrated Venetian painters of this time. Carlo Cignani (born 1628, died at Bologna, 1719) acquired a great reputation by his originality and the strength and agreeableness of his coloring. Of his scholars, Marc. Antonio Franceschini was

distinguished (born 1648, died 1729), whose works are charming and full of soul. Giuseppe Crespi, called *Spagnuolo*, deserves mention for his industry and correct style, but his pictures have unfortunately become very much defaced by time. Among the Romans, Pompeo Battoni (born 1708, died 1787) was principally distinguished, and was a rival of the celebrated Mengs. Angelica Kaufmann deserves to be mentioned.—We must not forget the Neapolitan and the Genoese schools. Of the Neapolitans, we name Tommaso de' Stefani (born 1230), Fil. Tesauo, Simone, Colantonio de' Fiori (born 1352), Solario il Zingaro, Sabatino (born 1480), Belisario, Caracciolo, Giuseppe Ribera Spagnoletto (born 1593), Spadaro, Francesco di Maria (born 1623), Andrea Vaccaro, the spirited landscape-painter Salvator Rosa (born 1615), Preti, called *il Calabrese* (born 1613), and Luca Giordano (born 1632, died 1705), who was called, from the rapidity of his execution, *Luca fa Presto*. Solimena (born 1657) and Conca belong to the modern masters of this school. The Genoese can name among their artists Semino (born 1485), Luca Cambiasi (born 1527), Paggi Strozzi, called *il Prete Genovese*, Castiglione (born 1616), Biscaino, Gaulli and Parodi. Perhaps the most distinguished of the living painters of Italy is Camocchini. This reputation, however, is not allowed him without dispute by foreign countries, and even by many artists of his native land. His style is grand, and purely historical; his drawings are even more highly esteemed than his paintings. His pieces, however, are cold, and their estimation seems to have diminished. Landi is a distinguished portrait painter, though his coloring is rather cold. The pencil of Grassi possesses an inimitable grace, and a true enchantment. Benvenuti, director of the academy in Florence, is the first artist there. A French artist (Fabre) in Florence is the competitor of Benvenuti; his landscapes and his pastoral scenes are equally excellent. Colignon is also a very able artist, in the same place. Appiani, who died a few years ago at Milan, was particularly celebrated for the grace of his female figures; and Bossi had equal reputation, in a more serious and severe style. The Florentine Sabbatelli's sketches with the pen are highly esteemed. Ermini, in Florence, is a charming miniature painter, in Isabey's manner. Alvarez, a Spaniard, and Ayez, a young Venetian, are in high repute at Rome. The young artist Agricola is particularly distinguished among

the artists of Rome. He is a native of Urbino. In purity of style, he is thought to surpass all modern artists. (For the history of Italian painters, see Lanzi's *Storia Pittorica*.)—In the art of engraving, the Italians have acquired great eminence. Tommaso Finiguerra, who flourished 1460, was the first celebrated master of this art, which he taught to Baccio Bandini. They were succeeded by Mantegna; but Marco Antonio Raimondi, of Bologna, who lived in 1500, was the first to introduce greater freedom into his engravings. His copies of Raphael have always been highly valued, on account of their correctness. His manner was imitated by Bonasone, Marco di Ravenna, Di Ghisi, and others. Agostino Carracci, Parmeggiano, Carlo Maratti and Pietro Testa etched some excellent works. Stefano della Bella was distinguished for his small, spirited and elegant pieces. Among the moderns, Bartolozzi deserves mention in stippled engraving. Cunego, Volpato, and Bettelini are also distinguished; but, above all, the Florentine Raphael Morghen, who has carried the art of engraving to a degree of perfection never before anticipated. The labors of Morghen, and yet more those of Longhi, perhaps the most admirable of all modern engravers, of Toschi, of Anderloni, of Folo, of Palmerini, of Lasinio, of Garavaglia, Lapi, Schiavonetti, evince an activity, to which new employment and new excitement have been afforded by the eagerness of travellers, and the number of splendid works on buildings (such as those on the cathedral of Milan, the Carthusian monastery of Pavia, the sacristy of Sienna, the Campo Santo of Pisa, the *Monumenti sepolcrali* of Tuscany, the principal edifices of Venice, the *Chiese principali di Europa*). One of the latest and best is the work of the brothers, Durelli, *La Certosa di Pavia*. The painter Francesco Pirvano, whose description of Milan exceeds all others in exactness, has also given us a description of this celebrated Carthusian monastery. As a medium between painting and sculpture (see *Sculpture*), we must mention mosaic, in which many paintings have been imitated in Italy, from the wish to render the master works imperishable. There is a distinction made between the Roman mosaic executed by Tafi, Giotto and Cavallini, and the Florentine. (See *Mosaic*.) Mosaic painting seems to have flourished as well in France, whither it was transplanted, as in Rome. The art of working in *scagliola* (see *Scagliola*) has flourished for two centuries in Tuscany. In later times, Lamberto Gori

has distinguished himself in this branch. Rome is still the metropolis of the arts. Pope Pius VII generously supported the plans of that lover of the arts, cardinal Consalvi; and the Chiaramonti museum, by every account the most superb part of the long galleries of the Vatican, will be a lasting monument of his noble patronage. All friends of the sublime and beautiful deeply felt the accident that befell St. Paul's church, near Rome, in the conflagration of 1823. To restore it would hardly be possible. The loss of this noble Basilica is not adequately compensated by the church of St. Peter and Paul, built opposite the castle of Naples, nor by the temple of Possagno, which, before it was finished, received the ashes of its founder, the great Canova. As a monument, to the embellishment of which that distinguished man contributed the last efforts of his genius, this church is a legacy highly to be esteemed by Italian artists. Sculpture and painting here again meet architecture in a sisterly embrace. Canova's death was the cause of its first solemn consecration. (For a particular account of Canova, see the article.) Notwithstanding the excellence of their master, little is to be expected from the Italians of Canova's school. The monuments which were executed or planned by Ricci for the present grand-duke of Tuscany at Arezzo, by Pisani for the princesses of the house of Este at Reggio, and by Antonio Bosa to the memory of Winckelmann, rather depress our hopes than exalt them. The principal ground of hope of future excellence is in the love which has been generally awakened for the plastic arts. Gem engraving has been carried to a very high degree of perfection; and Berini's labors well merit the wide reputation which they have acquired. As medalists, Manfredini in Milan, Pulinati and Mercandelli have produced works with which other countries present little that can compare. In Rome, Girometti and Cerbara are highly esteemed in this branch of art.

Italian Music. The style of music now prevalent in Italy is characterized by the predominance of melody and song to the neglect of harmony, and is distinguished from the old Italian music. Like other branches of modern art, the music of modern times sprung from religion. The history of the art, after pointing out a few imperfect glimmerings of ancient music, conducts us to Italy, where, in the course of centuries, the ancient was first lost in the modern. Here we first find the proper choral song, the foundation of mod-

ern church music, which was at first sung in unison, chiefly in melodies derived from the old Greco-Roman music, and adapted to Christian hymns and psalms. (See *Music*, and *Music, Sacred*.) It seems to have had its origin when bishop Ambrosius, in the fourth century, introduced into the western church songs and hymns adapted to the four authentic modes of the Greeks, and appointed psalmists or precentors. Gregory the Great, in the sixth century, enlarged the choral song by the plagal modes. From this time, singing-schools were multiplied, and much was written upon music. The most important inventions for the improvement of music generally, we owe to the 11th century, and particularly to the Benedictine Guido of Arezzo, who, if he did not invent the mode of writing musical notes and the use of the clef, improved and enlarged them, determined the exact relations of the tones, named the six tones of the scale (see *Solfeggio*), and divided the scale into hexachords. In the 13th century, the invention of music in measure was spread in Italy, dependent upon which was that of counterpoint and figured music. Instruments were multiplied and improved in the 14th and 15th centuries. Many popes favored music, particularly vocal, and consecrated it by their briefs; yet the ecclesiastical ordinances restrained the independent development of music. Much instruction was given in singing in the 15th century, and not entirely by monks. Music acquired the rank of a science, and vocal music in counterpoint was developed. In the 16th century, we discover distinguished composers and musicians—Palestrina, composer for the chapel of pope Clement XI, whose works possess great dignity and scientific modulation, and his successor, Felice Anerio, Nanino da Vallerano, who, together with Giovanni da Balletri, were considered as distinguished musicians; also the celebrated contrapuntist and singer, Gregorio Allegri, and the great writer upon harmony, Giuseppe Zarlino, chapel-master at Venice. Music at Rome and Venice was cultivated with the greatest zeal. Hence it went to Naples and Genoa; and all Italy, Schubert says, was soon a loud-sounding concert-hall, to which all Europe resorted to hear genuine music, particularly beautiful singing. In the 17th century, we meet with the first profane music. The first opera was performed at Venice 1624, at first with unaccompanied recitatives and choruses in unison; it spread so quickly, that the composers of spectacles were

soon unable to supply the demands of the people, and from 40 to 50 new operas appeared yearly in Italy. This caused great competition among the Italian musicians. Thus the peculiar character of the Italian music, not to be changed by foreign influence, was developed the more quickly, because this species was cultivated independently, and unrestrained by the church. Already, in the middle of the 17th century, when the music of the theatre was continually advancing, simplicity began to give place to pomp and luxuriance, and the church style to decline. Music (says Schubert) united the profane air of the drama with the fervor of the church style, and this was the first cause of the decline of the latter. Let us now consider the principal periods of the former. Vocal music must have been first; it was regulated by the discovery and improvement of instruments; thence arose the simple, grand church music of the 15th and 16th centuries; with it various forms of national song were developed. On the stage, the higher style of music flourished independently. Here the Italian, without much attention to the poetical part of the performance, which was, indeed, only the hasty work of a moment, followed his inclination for melody and sweet sounds, which appears even in his language. All the southern nations show a great sensitiveness, and melody is to them as necessary as harmony to the inhabitants of the North; but to no nation so much as to the Italians, whose beautiful climate and happy organization for song (Italy produces the most beautiful alto and tenor voices—few base) made melody their chief aim in their music. On the other hand, the simplicity of melody degenerated into effeminacy and luxuriance, from the time when vocal music developed itself independently, and the voice, but little supported by the instrumental music, began to be cultivated like an instrument; when, instead of poetical expression and truth, mere gratification of the ears, not deep emotion, but a momentary excitement, and a rapid change of tones, with the avoidance of all dissonance, were principally desired; when music began to predominate over poetry, which first took place on the stage, and thus the musical part of the performance obstructed the improvement of the dramatic and poetic. This taste spread over other countries so much the more easily, as Italian music had advanced, by rapid strides, far before that of the rest of Europe, as appears even from the predomi-

nance of Italian terms in musical language. This artificial development of the song was promoted by the introduction of soprano singers on the stage, which destroyed the possibility of poetic truth in dramatic representation. The voice was cultivated to the highest degree by means of the numerous conservatorios and singing schools. To this was added the great encouragement and the extravagant rewards of distinguished singers (Farinelli purchased a duchy); the great opportunities afforded for singing (as every place of consequence in Italy had its theatre, and many had several); besides which, music is an essential part of the service of the Catholic church, and castration was permitted *ad honorem Dei*, as a papal brief expresses it. The excessive culture of the voice must necessarily lead to the treatment of it as an instrument, to the neglect of poetical expression. Instrumental music, too, in this case, necessarily becomes subordinate. Instrumental music should not indeed overpower the song, as is the case in much of the French and German music; but in the Italian music, the composer is almost restricted to showing off the singer, and cannot develop the fullness and depth of harmony which depends upon the mingling of consonance and dissonance. This is the reason why the masterpieces of Mozart have never entirely satisfied the Italians. Among the best composers, since the 17th century, are Girolamo Frescobaldi, Francesco Foggia, Bapt. Lully, the celebrated violinist and composer Arcangelo Corelli. To the singers, of whom the most were also composers, belong Antimo Liberati, Matteo Simonelli, both singers in the chapel of the pope. In the beginning of the 18th century, Ant. Caldara was distinguished. He increased the effect of the singing by the addition of instruments, but his style partook much of the theatrical. There were, besides, Brescianello, Toniri and Marotti. In the middle of this century, Italian music, especially theatrical, flourished, particularly at Naples, Lisbon, and also in Berlin. This has been declared by some the most brilliant period of Italian music. There are some distinguished instrumentalists in Italy, as the organists Scarlatti and Martinelli, the violinist Tartini (who, even in the theory of his instrument, was distinguished, and established a school, which was devoted particularly to the church style), Domenico Ferrari, Geminiani, Ant. Lolli and Nardini, scholars of Tartini,

also the player upon the harpsichord and composer, Clementi, in London, and Paganini. Among the composers of the 18th century, are mentioned Traetta, who, through his refinements, injured the simplicity of composition; Galuppi, distinguished by simple and pleasing song, rich invention and good harmony; Jomelli (q. v.), who gave greater importance to instrumental music; Maio; Nic. Porpora, the founder of a new style of singing, distinguished for his *solfeggios* in church music; Leo; Pergolesi, whose music is always delightful, from its simple beauty (e. g. his *Stabat Mater*); Pater Martini, at Bologna; the sweet Piccini, rival of Gluck; Anfossi; the agreeable Sacchini (*Œdip.*); Sarti. (q. v.) Of a later date are Paesielo (q. v.), Cimarosa, the ornament of the *opera buffa*, and Zingarelli (Romeo and Juliet), Nasolini, Paganini, Niccolini, Pavesi, and the now much celebrated Generali and the copious Rossini. More like the Gernans were Salieri (q. v.), and the thorough Righini (he likewise has written *solfeggios*). Cherubini and Spontini have more of the French character. Among the celebrated male and female singers of Italy, since the 18th century, are Francesca Cuzzoni Sandoni, and her rival Faustina Bordoni (afterwards the wife of Hasse), and the Allegrandi, the sopranists Farinelli, Caffarelli, Genesino, Caristini, Marchesi: in later times, the celebrated Crescentini and Veluti; also the singers Baldassore Ferri, Siface Matteuce; the tenorists Millico, Pacchierotti, Bixi Benelli; the female singers Tesi, Mingotti, Gabrielli, Todi, Vandi, Marchetti, the sisters Sessi, particularly Imperadrice and Mariana Sessi, Angelica Catalani, Camporesi, Borgondio. The Italian school is yet unequalled in whatever depends upon the mere improvement of the voice; but the slavish imitation of their manner leads to affectation; therefore the German singers employ it no farther than they can without losing the spirit and poetical expression which the German song aims at.

Travels in Italy. No part of Europe has been so much visited as Italy, and none deserves to be visited more than this charming country, where a cloudless sky sheds perpetual brilliancy on the monuments of ancient greatness and the relics of ancient art, which conspire with the finest works of modern genius, to delight the eye, and to carry back the mind to the great men and great events of former times. The sight of modern Italy led Gibbon to write the sad story of the decline of her ancient gran-

deur; and how many poets have owed to Italy their inspiration! It is impossible to see Italy and not feel the grave monitions of history, or to pass through her happy vineyards without being cheered by the scene, or to gaze on her works of genius without feeling the worth and the dignity of the fine arts. No wonder, then, that Italy is visited from all quarters. During the general peace in Europe, from 1815 until 1830, crowds of foreigners, particularly Englishmen, hastened to the beautiful peninsula. The latter were so numerous, that the lower classes of Italy called every foreigner *un Inglese*. Among these there were, of course, great numbers who, without capacity for enjoying what they saw, hurried through the country according to the direction of their guide-books, in order to be able to say, at the tea-tables in London, How beautiful the view from Monte Pincio is! Every one who has been in Rome must have met with such a traveller, his *Vasari* in his hand, working his way with servile conscientiousness, through the beauties of the place. Expedition being an object with many of them, the shortest process for seeing all that was to be seen was soon found out, and flocks of travellers, at particular seasons, migrated to particular places. The average period of a jaunt through Italy is six months. The end of the journey is usually Naples, from which travellers advance south as far as the ruins of Pæstum. The Alps must be passed early in the autumn. The fairy islands of the Lago Maggiore, at that time, still wear their delightful drapery of fruits and leaves. The traveller then enters, at once, the south of Europe, so different from the north. For visiting the principal places in Upper Italy, the Bolognese and Tuscany, there are two months before the beginning of the carnival, which, of course, must be enjoyed in Rome. After having visited the galleries and monuments in and about Rome, the traveller proceeds, during Lent, to Naples, to see the spring awaken in the Campagna. At Easter, he returns to Rome. Who could visit Italy without hearing the heavenly music in the Capella Sistina, during Passion week! There will perhaps be time, on the return, to make an excursion to the Mark of Ancona; if not, no one, who has been to Rome through Sienna, will now fail to take the road through Terni, Perugia and Arezzo. Genoa and Venice, as the most western and eastern points, are convenient to begin or close the journey with. It may be better, however, to begin with Lombardy and Genoa, in the autumn, and

not to extend the period of return far into the hot season. Lombardy attracts but little, after Rome, Florence and Naples, have been visited; but Venice, silent, melancholy Venice, still remains an object of interest, even in her decrepitude under the Austrian sway. Such a journey will occupy from the beginning of October until the middle of May, and will enable the traveller to see the finest parts of the country and the most remarkable works of art. But to become thoroughly acquainted with Italy, as it is and as it was, no one can stay long enough. Rome alone will fully occupy a man's life. He who wishes to become particularly acquainted with the middle ages, and to form a lively picture of them, will remain longer in Florence and Pisa. Late in a moonshiny night, when every thing is quiet, walk through the streets of Florence, and you may easily imagine yourself a contemporary with the Medici. He who wishes to devote himself to the antique or to Roman history, will stay longer in the *alma città*. Here he will also find himself at the fountain head of sacred music. He who desires to enjoy the beauties of a bountiful nature, will remain longer in Naples, lying like a paradise surrounded by the fields of Campagna, where the gigantic vine twines round the lofty poplars, and forms an embowering shade over the luxuriant grain. He who prefers to see a country where nature and man have not been much influenced by civilization, will proceed to Calabria and Sicily, which afford also the richest harvest to the botanist and mineralogist. He who wishes to become more fully acquainted with the history of the fine arts in the middle ages, will go to the smaller places, distant from the great roads, where he will find innumerable treasures, often unknown to most Italians themselves; as the historian finds rich treasures in the manuscripts stored up in the monasteries, illustrative of the contests of Italian powers among themselves in the middle ages, as well as of the great contest between the secular and ecclesiastical powers, the emperor and the pope: and what a boundless field is spread before the scholar in the Vatican! There are two ways of travelling in Italy, with post-horses (in which case a carriage belonging to the traveller is almost indispensable), or with the *vetturino* (in a hired coach). He who travels without a family, and wishes to become acquainted with the people, will do best to adopt the latter mode. The traveller makes his bargain with the *vetturino*, not only for

conveyance, but also for supper and lodging. The general price for the conveyance, from 35 to 40 miles a day, together with the meal and lodging, is about a ducat per day. As the reputation of a *vetturino* depends upon the good treatment of his travellers, it is his interest to procure a good meal and a clean bed; thus travellers are spared the trouble of bargaining with the host. That the innkeepers in Italy have a general disposition to fleece the traveller, is certain; and this leads many travellers, particularly English, not to touch a trifle in any inn without making a bargain; for which very reason they are regularly overreached. The same disposition makes many English travellers so troublesome in Germany, where, the living being cheap, they expect to pay next to nothing in the first hotels, so that some hotels have actually refused to admit them. In large cities, where the traveller expects to stay some time, his best rule will be to make a fair bargain after the first day, when he knows what he has to expect. Another great inconvenience for travellers arises from the *ciceroni* or *servitori di piazza*. These people, who have a share of what the *custodi* and the poorer possessors of some single curiosities receive from the travellers, have an interest in directing the traveller to every corner where an inscription, a piece of a column, &c., is to be found. But how to avoid this, since a *cicerone* is indispensable? Two general rules may be found serviceable; not to attend, in Italy, to any thing but what is peculiar to Italy; collections of minerals, Japan porcelain, &c., are to be found in other countries; and, secondly, to prepare one's self for the journey, and to know beforehand, in general, what is to be seen. Of course, these rules are only for those who do not stay for a long time in a place, and have no time to make acquaintances for themselves. Three nations, particularly, have furnished descriptions of Italy, the English, Germans and French. We recollect to have seen a very old and curious little book, a *Guide through Italy for Pilgrims*. The images of the virgin, miraculous relics, &c., of course formed the great mass of the book; but antiques, columns, &c., had received a Christian character, and were named after the apostles, &c. The works of which we here speak, properly begin toward the end of the 17th century, at which time the descriptions of Italy assume a more independent character. Since that time, the number has, particularly of late, greatly increased, so

that this branch of literature, in Germany, is almost in disrepute. Among the earlier works in English, the most esteemed are those of Burnet, Addison, and the others mentioned below. Gilbert Burnet, bishop of Salisbury, travelled, in voluntary exile, through France, Germany, Switzerland and Italy, in 1685. His observations relate principally to religion and politics, on which subjects his views are those of a zealous Protestant and Whig. His work was succeeded by that of Addison—Remarks on several Parts of Italy (1705), chiefly devoted to antiquity—and the less known works of John Breval (1726) and Edward Wright (1727). The journal of the French emigrant Blainville, who had become naturalized in England, appeared after his death, and was edited by Turnbull and Guthrie in 1742. The remarks of these travellers are chiefly directed to the classical antiquities of Italy, and they therefore have been designated by the name of *classical travellers*. Smollett's travels treat chiefly of modern Italy and the inhabitants, and are full of a morbid querulousness. The same is true of Sharp's. Barretti defended his country from the attacks of Smollett and Sharp, in his Account of the Manners and Customs of Italy (1767). John Moore's View of Society and Manners in Italy is still interesting, and is rich in characteristic anecdotes. Patrick Brydone's picturesque description of Sicily is too celebrated to be passed over in silence, though it relates merely to that island. Among the numerous recent publications on Italy, few have acquired reputation in foreign countries. We may mention Forsyth's Remarks on Antiquities, Arts and Manners during an Excursion in Italy in 1802—3 (London, 1813). Eustace's Classical Tour through Italy (1802, in 2 vols., much enlarged in 1817, in 4 vols.) is prejudiced and inaccurate. Lady Morgan's Italy betrays the novelist. It is not to be recommended as a guide through Italy. The Florentine A. Vieusseux, who left his country in early youth, and entered the British service, travelled through Italy, and wrote Italy and the Italians in the 19th Century (London, 1824, 2 vols.). Among the other English books of travels in Italy, which have appeared within the last ten years, may be mentioned Bell's Observations on Italy. Simond's valuable Tour in Italy and Sicily appeared in 1828; Narrative of three Years' Residence in Italy appeared in London, 1828; Lyman's Political State of Italy, Boston, 1820; Rembrandt Peale's Notes on Italy, Philadel-

phia, 1831; Bigelow's Tour in Sicily and Malta, Boston, 1831. Of the French works on this subject, we may cite first the work of Maximilian Misson, a counsellor of parliament (in 1691), much read at the time in England and Germany. The works of Rogissart (1706), of Grosley (*Mémoires sur l'Italie par deux Gentilshommes Suédois*, 1764), and of madame du Bocage (1765), did not preserve their reputation long. The abbé Richard's *Description de l'Italie*, &c. (1766, 6 vols.) was useful, as was also the work of Lalande (most complete edition, 1767), written on the same plan. It is a systematic description of a tour, and is the basis of the German work of Volkmann. Dupaty's popular *Lettres sur l'Italie* (1788) are recommended by elegance of style and warm feeling. Their matter is not important, and affords little information to the traveller. The Corinna of madame de Stüel does not belong to this branch of literature in form, but it does in substance. It is a noble production throughout, and even where the views are erroneous, they are nevertheless instructive. The *Lettres sur l'Italie*, par A. L. Castellan (Paris, 1819, 3 vols.), are entertaining and instructive. Germany, which is fertile in every branch of literature, is so in descriptions of Italy, or travels in Italy. There are some excellent works in German, treating of the scientific treasures of Italy; but this is not the place to enumerate them. The German descriptions of Italy are often characterized either by a minute collection of facts, without much attention to agreeable arrangement, or a romantic exaggeration, which arrays all Italy in heavenly colors, and inhales fragrance from the very *immondezza*. The learned Keyssler, who wrote in 1740, complains of a host of predecessors. His work (which was augmented in 1751 and 1776) was followed by a number of translations and *rifacimenti* of English and French works, particularly the excellent account of Volkmann, already mentioned (in 1770 and 1771, with additions by Bernouilli since 1777, 6 vols.). A new continuation and correction of this work would afford a very useful manual for travellers. Archenholz's *Italien* (1785, augmented in 1787) represents the country according to English views. Jagemann opposed him in a vindication of Italy (*Deutsches Museum*, 1786). To this class of works belong Göthe's Fragments on Italy, published at the end of the last century, and his Journal, published but a few years since. Count Leopold von Stolberg (1794) wrote a description of his journey. Frederica Brun, Küttner (1796 and 1801),

E. M. Arndt, Seume (his *Spaziergang nach Syrakus* is a work fitted to gratify a sound mind, and appears to advantage among the host of sentimental publications, though it is by no means a guide), Gerning, Benkowitz and J. H. Eichholz, are among the legion of writers on Italy. Kotzebue poured out his satirical spirit, also, on this country. P. J. Rehfuës has, since 1807, published several works on Italy. Madame von der Recke's Journal was translated into French by Mad. de Montolieu, and is a compendious travelling library, which touches on almost every thing important to a traveller. Kephallides (1818) unites much information with animated description. F. H. von der Hagen's (1818—1821, 4 vols.) work is valuable, particularly for its observations on the arts in the middle ages, as attention is generally paid only to classical art, and to the modern since the time of Raphael. Müller's *Rom, Römer und Römerinnen* has met with applause as a picture of manners and customs. There exist a number of descriptions of parts of Italy, which we have not room to enumerate. On Sicily, one of the latest works is *Voyage en Sicile fait en 1820 et 1821, par Auguste de Saye* (Paris, 1825, 3 vols.). Neugebauer's *Handbuch für Reisende in Italien* (Leipsic, 1826) contains much information of value to travellers. Among the works which portray the beauties of Italian nature, one of the best is *Vues pittoresques de l'Italie*, by Coignet, drawn after nature and lithographed (Paris, 1825).

ITE, MISSA EST (*Latin*, go—the meeting is dissolved); a formula by which, on joyful feasts, the end of the low mass is announced to the people, and the assembly dismissed. The priest steps into the centre of the altar, and sings these words after the *Dominus vobiscum*. After a mass for the dead, instead of these words, he sings, *Requiescat in pace*, on which the response is, *Amen*. In Lent, Advent and the days of penitence, he says, *Benedicamus Domino*, to which the response is *Deo gratias*. The word *mass* is derived from *missa est*.

ITHACA (*Ἰθάκη*), or, as it is called by the moderns, *Thiaki*; one of the seven Ionian islands (q. v.) lying in the gulf of Patras; lon. 21° 1' E., lat. 38° 36' N.; 18 miles long, and not over 5 broad; population, 8000. The whole island is rugged and uneven. Ithaca is celebrated as the island of Ulysses, and is minutely described by Homer in the *Odyssey*. Of the places mentioned by Homer, many can be traced with great appearance of probability. The *Κορακός πέτρα* (*Od.* xiii. 403) is still

called *Coraco-petra*. The ruins of Cyclopean walls are described as similar to those of Argos, Tiryns and Mycenæ. The spring of Ithacus and the walls of the city, as well as the Acropolis, can also be traced. A sculptured rock, called *Homer's school*, somewhat resembles that which bears the same name in Scio (Chios). Pateras, vases, bracelets, chains, strigils, mirrors, lamps, coins, &c., have been dug up in an ancient burying-ground here.

ITHACA, a large and flourishing village of the state of New York, is beautifully situated about a mile and a half south of the head of the Cayuga lake, being 170 miles west of Albany; population about 4500. It has an academy, including a lyceum, a bank, a court-house and jail, a market-house, a Lancasterian school-house, and four houses of public worship. The Clinton house is a large and elegant house of entertainment. There are three printing-offices, from which issue three weekly papers. The scenery around the village is romantic and pleasing. The hills about three miles from the village are from 300 to 500 feet high. Ithaca has five durable mill streams. Fall creek, the largest, descends, within one mile of the village, 438 feet, over several stupendous cataracts, and, winding across the plain, enters the head of the Cayuga lake. The view of the last fall into the valley, is striking and grand. The whole sheet of water is precipitated over the rock 116 feet, and the banks above are 100 feet higher than the rock. The Cayuga inlet, passing through the village to the lake, is navigable for boats of 40 or 50 tons. The navigation is perfectly good through the lake, Seneca and Cayuga canal, to the Erie canal. There are, already, manufactories of cotton and wool, flour, paper and oil, iron founderies, &c., although but a few of the many valuable mill sites are occupied.

ITURBIDE, Augustin, was born at Valladolid de Mechoacan, in New Spain, in 1784. Being of a family of some consideration in his country, he received a very careful education. Until 1810, he held no higher rank than that of a lieutenant in the provincial regiment of his native city. At this period, when the troubles in Mexico broke out, he entered into active service against the patriots, and was engaged in various contests with bodies of his insurgent countrymen. Borne along by circumstances in the career of arms, he had risen, in 1816, by his valor and capacity, to the command of what was called

the *northern army*, which occupied the provinces of Guanaxuato and Valladolid. About this time, he was suspected and accused of want of fidelity to their cause, by some of the royalists, but was acquitted of the imputation by the viceroys Calleja and Apodaca. But the disgust which he felt in consequence of this charge, led him to retire for a while from active service. In 1820, we find Iturbide again in the field, under circumstances which gave him unexpected importance. At that period, the imprudent acts of the Spanish cortes produced so much exasperation among the clergy and the partisans of absolutism in Mexico, that these persons united to effect the independence of the country. They selected Iturbide as their agent, knowing his zealous agency in putting down the revolutionists and republicans of past years, and wholly unconscious of the views of personal aggrandizement which he entertained. Being furnished with some money by them, he set out for the south; and, having seized a convoy of specie on his route, he soon formed a junction with Guerrero, one of the patriot chiefs. Meanwhile emissaries had been despatched in all directions to prepare the people, who were accordingly ripe for revolution. At length the army reached Iguala, where (Feb. 24, 1821) Iturbide proposed the *plan* which bears the name of that place;—the great objects of this instrument being the independence of Mexico, the protection of religion, and the union of the Spaniards and Mexicans. At the same time, an offer of the crown was made to Ferdinand VII, or to any other member of the royal family of Spain. On the strength of this plan, Iturbide continued his march to Queretaro, and was soon joined by Guadalupe Victoria, the most devoted of the friends of liberty. Meantime the viceroy O'Donju arrived from Europe, and, finding the whole country virtually with Iturbide, signed a treaty at Cordova (August 24, 1821), acceding to the provisions of the plan of Iguala. The road to power was now entirely open before Iturbide. He took possession of the capital in the name of the nation, and established a regency, consisting of members nominated by himself, and wholly under his control. The republican party soon saw the object of his movements. A congress had been assembled, which made various attempts to counteract his designs by diminishing his power, and at last brought the matter to an open rupture and a crisis. Iturbide, seeing no other way to preserve his au-

thority, resolved to usurp the crown, through the subserviency of his troops. Accordingly, May 18, 1822, the garrison and a part of the populace of Mexico rose and proclaimed Iturbide emperor, under the name of Augustin I. The next morning, congress was convened in extraordinary session, in the midst of the acclamations of the multitude, whose cries often drowned the voices of the deputies. The agents of Iturbide obtained a decree requiring his presence; and he appeared, accompanied by a number of military officers, having been drawn through the streets by the rabble. His election to the imperial dignity was proposed and discussed in his presence, and was voted for by 77 deputies, out of 94 who had assembled, being about one half the whole body of delegates. He returned to the palace as he came, in a coach drawn by the people. Shortly afterwards, the congress decided that the crown should be hereditary in the family of Iturbide, gave to his sons and his father the title of *princes*, fixed upon him a yearly allowance of a million and a half of dollars, and established an order of knighthood called the *order of Guadalupe*, thus completing, in every thing, the accessories of the new monarchy. All these arrangements were voted with a degree of unanimity which clearly proved the absence of liberty; and the provinces yielded a blind submission to what was decreed in the capital. The friends of liberal institutions, overawed and held at bay by the power of the usurper, fled to their wonted retreats, or temporized until a fitting season should arrive for acting with union and efficiency. But they could not, and did not, acquiesce in a state of things so adverse to their feelings. Iturbide was driven by his necessities to hasten affairs to a crisis. In October, 1822, he seized and confiscated, without legal process, a convoy of \$1,200,000, on the way from Mexico to Havana. In the month of August preceding, he had caused several of the members of congress to be arrested, regardless of their privilege of personal inviolability. Finally (Oct. 30, 1822), he ordered the dissolution of congress, causing the hall to be shut, of his own authority, and, on the same day, organized a junta to take the place of the legislative body, and nominated all the members himself. To supply the exigencies of the government, recourse was then had to forced loans, which served the more to exasperate the minds of the people, already disgusted with the successive usurpations of Iturbide. Circumstances,

however, foreign to his acts of general oppression, brought on the catastrophe. At this time, the Spaniards retained possession of the castle of San Juan de Uluá, which commanded the port of Vera Cruz. The emperor had left the city of Mexico, and advanced as far as Jalapa, intending, if possible, to obtain an interview with the governor of the castle. Disputes had previously arisen between general Santa Aña, governor of Vera Cruz, and general Echavarrí, who commanded the southern division of the Mexican army; and Santa Aña was summoned to Jalapa by the emperor, to answer to the charges of Echavarrí. Santa Aña counted much upon the services which he had rendered Iturbide, and on his own popularity; but, to his great surprise, he was treated harshly, and dismissed from his command at Vera Cruz. Hastening back to the garrison, before the news of his disgrace could reach them, he excited them to revolt, for the purpose of dethroning Iturbide, and establishing a republican government. He found the troops ripe for his purpose, and lost no time in advancing to Puente del Rey, where several skirmishes took place between the republicans and the imperialists under Echavarrí. At length Victoria made his appearance, and was appointed commander-in-chief of the insurgents; and, in February, 1823, Echavarrí and his army joined forces with Victoria and Santa Aña, by the convention of Casa Mata. Defection now became general among the officers of the army, and in all the provinces, so that Iturbide saw plainly that his cause was hopeless, and hastily assembled at Mexico the dispersed members of congress, and tendered to them his abdication of the crown. This happened March 20, 1823. Congress very generously agreed to grant Iturbide a yearly pension of \$25,000, on condition of his leaving the Mexican territory for ever, and residing somewhere in Italy, making suitable provision for his family in case of his death. He proceeded to the coast, under escort of general Bravo, and embarked May 11, 1823, for Leghorn. He might have continued to live happily in one of the charming villas of Tuscany, had he not been impelled by an insane ambition to attempt the recovery of his lost empire. With this object, he left Italy for England, and embarked for Mexico May 11, 1824, precisely a year after his departure from it, and arrived in sight of the port of Soto la Marina July 14. During the year that had elapsed, the Mexicans had adopted a republi-

can constitution, and Iturbide had no party nor friends in the nation. The government had been apprised of his leaving Italy, and suspected his design. A decree was passed, bearing date April 28, 1824, declaring him to be proscribed as a traitor, and requiring that, in case he landed in the country, the mere fact should render him a public enemy. Wholly deceived in regard to the fate which awaited him, Iturbide landed at Soto la Marina, accompanied only by his secretary, a Pole, named Beneski, and was almost immediately arrested by order of D. Felipe de la Garza, the commandant-general of the state of Tamaulipas, in which Soto la Marina is situated. La Garza lost no time in conducting his prisoner to Padilla, the provincial capital, and demanding instruction how to act, of the provincial legislature. He was instructed to put in execution, forthwith, the decree of congress, of April 28th, by causing Iturbide to be shot,—apprehensions being entertained lest any delay in the enforcement of the decree should be the cause of some troublesome, although of necessity abortive, movement, on the part of the people. This took place July 18th; and, on the 19th, La Garza notified Iturbide to prepare for death on the same day. Iturbide in vain solicited for a reprieve until the general government could be informed of his situation, and have opportunity to decide upon his case. This, of course, La Garza denied him; and at six o'clock in the afternoon, after having confessed himself, he was conducted to the place of execution, where 60 or 70 soldiers stood in their ranks, under command of La Garza. Iturbide then made a short address to the assembled people, protesting his innocence of any treasonable purpose, exhorting them to observe the duties of patriotism, religion and civil subordination, and declaring that he pardoned his enemies. He was shot dead at the first fire; and his body was interred as decently as the means of the small town permitted. While this was passing at Padilla, the wife of Iturbide and two of his children, who had accompanied him from England, had landed at Soto la Marina. They brought with them a large quantity of proclamations, circulars and other papers, intended to aid the design of the ex-emperor, together with his imperial mantle and other insignia. So soon as the captain of the brig in which they came learnt the fate of Iturbide, he cut his cables and stood out to sea, leaving the widow and children of Iturbide totally destitute of every neces-

sary, and at the mercy of the very men who had just ordered the execution of her husband. But the feelings of the Mexican government were just and liberal. They continued to the widow the pension promised the family of Iturbide at the time of his abdication, annexing only the condition that she should live either in Colombia or the United States, in which latter country she has ever since resided. Such was the end of a man, estimable in his private character, and not without talents, who, if his fortune had led him to use his influence in the establishment of a free government, might have continued long at the head of affairs, and finally have departed from life respected and honored as a patriot, instead of prematurely suffering the ignominious death of a malefactor. (*Pamphleteer*, No. 56; *Annales Biographiques pour 1826*; Poinsett's *Mexico*.)

ITUZAINGO; the scene of a celebrated victory gained by the troops of Buenos Ayres, under Alvear, over the Brazilians. In the campaign of 1827, the republicans pushed their forces into the province of Rio Grande, and encountered the enemy on the field of Ituzaingo, Feb. 20, 1827. The battle was obstinately disputed for six hours, but was gained at length by the reiterated and furious charges of the cavalry of the Banda Oriental. The Brazilians lost marshal Abreu, ten pieces of artillery, all their munitions of war and baggage, and about 2000 men. (*Ann. Register*.)

ITYS, son of Tereus and Procne. (See *Philomele*.)

IVICA, IVIZA, or IBIZA (*Ebusus*); an island of the Mediterranean, belonging to Spain, and the principal of the group called the *Pithyusæ*. Its extent is 190 square miles; its population, 21,094. The soil is fertile, producing corn, wine, oil, fruit, flax, and hemp, with little labor. About 15,000 tons of salt are annually obtained by evaporation; and it forms, with fish and wood, the chief article of export. 52 miles from Majorca.—The capital is of the same name, and has a good harbor. Population, 2700.

IVORY; the substance of the tusk of the elephant. Ivory is esteemed for its beautiful cream color, the fineness of its grain, and the high polish it is capable of receiving. That of India is apt to lose its color, and turn yellow; but the ivory of Achem and Ceylon is not chargeable with this defect. Ivory is used as a material for toys, and as panels for miniature-paintings. To prepare it for the latter purpose,

it is to be washed with the juice of garlic, or some other absorbent composition, to remove its oily particles. The shavings of ivory may be reduced into a jelly, of a nature similar to that of hartshorn; or, by burning in a crucible, they may be converted into a black powder, which is used in painting, under the name of *ivory-black*. Ivory may be stained or dyed: a black color is given it by a solution of brass and a decoction of logwood; a green one, by a solution of verdigris; and a red, by being boiled with Brazil-wood, in lime-water. The use of ivory was well known in very early ages. We find it employed for arms, girdles, sceptres, harnesses of horses, sword-hilts, &c. The ancients were also acquainted with the art of sculpturing in ivory, of dyeing and encrusting it. Homer refers to the extreme whiteness of ivory. The coffer of Cypselus was doubtless the most ancient monument of this kind in basso-relievo, and we meet with similar instances in the temple of Juno at Olympius, in the time of Pausanias; that is to say, 700 years after it had been built. The ancients had numerous statues of ivory, particularly in the temples of Jupiter and of Juno, at Olympius. In these statues, there was very frequently a mixture of gold. The most celebrated are stated to have been the Olympian Jupiter and the Minerva of Phidias: the former was covered with a golden drapery, and seated on a throne formed of gold, of ivory and cedar wood, and enriched with precious stones. In his hand the god held a figure of Victory, also of ivory and gold. The Minerva was erected in the Parthenon at Athens during the first year of the 87th Olympiad—the year which commenced the Peloponnesian war. Pausanias likewise makes mention of an ivory statue of Juno on her throne, of remarkable magnificence, by Polycletes, together with numerous others.

IVORY COAST; part of the coast of Guinea, between cape Apollonia and cape Palmas. (See *Guinea*.)

IVY (*hedera helix*); a shrubby vine, celebrated from remote antiquity, and held sacred in some countries, as in Greece and Egypt. The leaves are smooth and shining, varying much in form, from oval entire to three or five lobed; and their perpetual verdure gives the plant a very beautiful appearance. The flowers are greenish and inconspicuous, disposed in globose umbels, and are succeeded by deep green or almost blackish berries. It ascends to the summits of the tallest trees,

having a stem sometimes three inches in diameter, and also clings to the sides of old walls, rocks, &c. It is found throughout almost the whole of Europe, and in many parts of Asia and Africa.

IWAN, OR IVAN; the name of several persons distinguished in Russian history. The most celebrated are Ivan Wasiliewitch and Ivan II, who laid the foundation of the Russian empire. (See *Russia*.) Ivan V (or II), Alexejewitsch, who inherited the crown during his minority, was half brother of Peter I, but, on account of his mental imbecility, took no part in the government. Ivan VI (or III) was grand-nephew of the former, and son of the grand-princess Anna and of Antony Ulrich, duke of Brunswick-Wolfenbüttel. The empress Anna (q. v.) took him, in 1740, out of the hands of her niece, declared him her son, and gave him an apartment near her own. She soon after declared the child her successor, and her favorite Biron was to be his guardian and regent. Biron caused the oath of allegiance to be taken to the prince, and, when he was banished, the parents of the child assumed the reins of government, until the daughter of Peter I, Elizabeth (q. v.), ascended the throne. The young Ivan was taken from his cradle by soldiers, and shared the fate of his banished and imprisoned parents. He was at first imprisoned at Ivangorod, near Narva, it being intended to keep him always in Russia; but his parents, who were confined at first in Riga, were to be sent to Germany. He never saw them again, but always remained a prisoner in different places, particularly in Western Prussia. In 1756, he was carried to the fortress of Schlüsselburg. In 1763, Mirowitch, a nobleman of the Ukraine, who was lieutenant in the garrison of the above fortress, conceived the design of delivering the prince. He induced several soldiers to assist him, and, by means of a forged order from Catharine, he attempted to obtain admission to Ivan; but two officers, who guarded him, when they saw that resistance was fruitless, stabbed the unfortunate prisoner, in consequence of an order formerly given by the empress Catharine, that he should be put to death in case of an attempt to deliver him by force. She had already destroyed every proof of the claims of the prince to the throne, and prohibited, under penalty of death, the keeping of coins which could remind the nation of him. The chapel in Schlüsselburg, in which he was buried, was afterwards destroyed.

IXION ; a king of Thessaly, son of Phlegyas, or of Leontes, or, according to Diodorus, of Antion by Perimela, daughter of Amythaon. He married Dia, daughter of Deioneus, and promised his father-in-law a valuable present for the choice he had made of him to be his daughter's husband. His unwillingness to fulfil his promises, obliged Deioneus to have recourse to violence, and he stole away some of Ixion's horses. Ixion concealed his resentment, invited his father-in-law to a feast at Larissa, the capital of his kingdom, and, when Deioneus was come according to the appointment, he threw him into a pit, which he had previously filled with wood and burning coals. This treachery so irritated the neighboring princes, that all of them refused to perform the usual ceremony, by which a man was then purified of murder, and Ixion was shunned by all mankind. Jupiter had compassion upon him, and placed him at the table of the gods. Ixion became enamored of Juno, and attempted to seduce her. Juno was willing to gratify the passion of Ixion, or, according to some, she informed Jupiter of the attempts which had been made upon her virtue. Jupiter made a cloud in the shape of Juno, and carried it to the place where Ixion had appointed to meet Juno. Ixion was caught in the snare, and from his embrace with the cloud, he had the Centaurs. (See *Centaurs*.) Jupiter banished him from heaven ; but when he heard that he had the rashness to boast that he had seduced Juno, the god struck him

with his thunder, and ordered Mercury to tie him to a wheel in hell, which continually whirls round. The wheel was perpetually in motion ; therefore the punishment of Ixion was eternal.

LYNX ; daughter of Pan and Echo, or of Peitho (the *Suada* of the Romans). She inveigled Jupiter into his intrigue with Io. As a punishment, Juno changed her into a bird, called the *wry-neck* (*Iynx torquilla*), which still possessed the power of exciting love. When it became desirable that Medea should be enamored of Jason, Venus gave the hero the magic iynx, and instructed him how to use it in order to inspire Medea with a passion for him. From this time, the iynx became a part of the love-spells among the Greeks. The enchantress tied the bird to a four-spoked wheel, which she turned while she muttered her incantations ; or, according to some traditions, she only stretched upon the wheel the entrails of the wry-neck. Another method was, to consume the bird over the coals, on a wheel of wax. The magic wheel was also called *iynx*, because the bird or its entrails were extended upon it. It is sometimes used as a symbol of the art of exciting love in general, and more particularly of unchaste love. In the sequel, the signification of the word *iynx* became different ; and it was extended to every charm in poetry and music. In this sense, the iynx went under the name of the nightingale ; and it is thus represented on the monument of Sophocles, and in the temple of the Pythian Apollo.

J.

J ; the tenth letter, and seventh consonant, of the English alphabet. The character *j* designates very different sounds in the different languages. In English, according to Mr. Webster, it represents the sound *dzh* or *edzh*. It has, in fact, the same sound as *g* in *Giles*. In French, it is always sounded like the French *g* before *e* and *i*. In German, it has the sound of the English *y* in *you*. In Italian, it is always a vowel (long *i*), and the character *j* is now little used by Italian printers, except at the end of words, for *ii*. In Spanish, it is guttural, a little softer than the

German *ch* in *ach*. How nearly the sounds which are expressed by *j* are related, has been shown in the article *G* ; and, in the article *I*, it is mentioned, that *i* before another vowel naturally becomes the German *j*. (For other observations, also relating to *j*, see the article *I*.) Though the character *j* is very ancient, it is only in recent times that it has been taken for a consonant, and still more recent is its separation from *i* in dictionaries. In France, the use of *j* for the consonant, and *i* for the vowel, was not established in the middle of the 17th century. Among other

nations, the mixture continued later. James Pelletier, of Mans, is said to have first placed the *j* at the beginning of words which began with this consonant, in his French Grammar (1550). Gille Beys, printer in Paris, imitated him in 1584. In regard to the separation of words beginning with the two letters, in dictionaries, the editors of the French *Grande Encyclopédie*, printed in 1765, did not dare to make it; and English dictionaries, even at the present day, are too often disfigured by the mixing together of *I* and *J*, as well as *U* and *V*. The *Encyclopédie Moderne* calls *j* a *lettre proprement Française*. The other nations adopted it from the French. The Romans, in inscriptions and legends of medals, wrote all words which we write with a *j*, as *Jupiter*, *Justinus*, with an *i*, as *Iupiter*, *Iustinus*. Yet the character *j* existed several centuries before the fall of the Roman republic. The Greeks had it not.

JABLONSKY; the name of several learned Germans.—*Daniel Ernest* was born at Dantzic, in 1660; became a minister in Magdeburg; in 1686, rector of the gymnasium at Lissa; in 1690, pastor in Königsberg, and went afterwards to Berlin, where he died, in 1742, being then bishop or senior of the Bohemian Brethren in Prussia (Proper) and Great Poland. He endeavored to unite the Lutherans and Calvinists. Through queen Anne of England, he received the dignity of doctor of divinity, from the university of Oxford. He published a number of sermons and several learned works on theology; among which are his *Biblia Hebraica cum Notis Hebr.* (Berlin, 1699); *Jura et Libertates Dissidentium in Polonia; Oppressorum in Polonia Evangel. Desideria*.—His brother, *John Theodore*, was likewise an author.—*Paul Ernest*, son of John, born at Berlin, 1693, was appointed professor of theology and preacher at Frankfort on the Oder, where he died, 1757. He wrote many works: *Disquisitio de Lingua Lycaonica* (Berlin, 1714, 2d edit., 1724); *Exercitatio de Nestorianismo* (ib., 1724); *Remphah Egyptiorum Deus ab Israelitis in Deserto cultus* (Frankfort, 1731); *Dissertationes VIII de Terra Gosen* (ib., 1715, 1736, 4to.); *Pantheon Egyptiorum sive de Diis eorum Commentarius* (3 vols., ib., 1750—52); *De Memnone Græcorum et Egyptiorum* (ib., 1753, 4to., with engravings); *Opuscula ed. J. G. Waler* (4 vols., Leyden, 1804 to 1813).—*Charles Gustavus*; a naturalist, born 1756, and died at Berlin, 1787, while secretary to the queen of Prussia; particularly known by the work commenced by

him—*Natural System of all known native and foreign Insects*, as a Continuation of Buffon's *Natural History*—of which, however, he executed only vol. 1, the Beetles (Berlin, 1783), and vols. 1 and 2, the Butterflies (ib., 1783 and 1784). It was continued and finished by T. F. W. Herbst.

JACAMAR (*galbula*, Brisson). These brilliant birds are nearly connected with the kingfishers, from which, however, they differ by the form of their beak and feet. Their plumage has a metallic lustre, which it is almost impossible to imitate by art. They live in damp woods, and feed on insects. Most if not all the true jacamars, are natives of tropical America. There are several species found in India, having a shorter and stouter beak, to which Le Vaillant has given the generic name of *jacamerops*.

JACK. Mr. Tyrwhitt, in his note upon v. 14,816 of Chaucer, says, "I know not how it has happened that, in the principal modern languages, *John*, or its equivalent, is a name of contempt, or at least of slight. So the Italians use *Gianzi*, from whence *zani*; the Spaniards, *Juan*, as *bobo Juan*, or *foolish John*; the French, *Jean*, with various additions; and in English, when we call a man a *John*, we do not mean it as a title of honor. Chaucer, in v. 3708, uses *Jack-fool* as the Spaniards do *bobo Juan*, and I suppose *Jackass* has the same etymology." To this we will add, that the Germans use *Hans*, their nickname of *John*, for the same purpose; as, *Hans narr*, *Jack-fool*; *dummer Hans*, stupid *Jack*, &c. Pennant also, in his *Zoology* (iii. 342), remarks, "It is very singular that most nations give the name of their favorite dish to the facetious attendant on mountebanks. Thus the Dutch call him *Pickle herring*; the Italians, *Macaroni*; the French, *Jean potage*; the Germans, *Hans wurst*, i. e. *Jack-sausage*; and the English give him the title of *Jack-pudding*.—The name of *Jack Ketch* seems to have become permanently generic for the common hangman.—The names of the *boot jack* and *roasting jack* are derived by Watts, in his *Logic*, from the circumstance that boys (who of course often had the common name *Jack*) were formerly employed to pull off boots and to turn spits; and when instruments were invented for these purposes, the common name of the boys was given them in sport.—The common *roasting jack* consists of a double set of wheels, a barrel, round which the rope fastened to the pulleys is wound, a perpetual screw, and a

fly. Occasionally there is added a multiplying wheel, round which the rope is first wound, before it passes upon the barrel. As this wheel is considerably larger than the barrel, the jack is proportionably longer in running down.—The *smoke jack* is moved by a fan placed horizontally in the chimney, and, being carried about perpetually, by the draught of the fire, requires no machinery for winding it up. Spiral flyers, coiling about a vertical axle, are sometimes used, and occasionally a vertical wheel, with sails like the float-boards of a mill.—*Jack* is also used for a coat of mail, and likewise for the garment worn over it.—*Jack boots* are large boots to cover and protect the legs.—*Jack* is also used for a horse or wooden frame to saw timber upon; for a great leathern pitcher, in which drink was formerly put; for the small bowl that serves as a mark at the exercise of bowling; and for a young pike.—*Jack*, in sea language, is a sort of flag displayed from a mast erected at the outer end of a ship's bowsprit.

JACKAL (*canis aureus*, Lin.). There is no essential difference between the dog and the jackal, as they will breed together, producing prolific offspring. This species of quadrupeds is very widely extended throughout the warmer regions of the old world. It is found in Africa, from Barbary to the cape of Good Hope; in Syria, in Persia, and throughout all southern Asia. It is about two feet and a half in length, and about 14 inches in height; the length of the tail, about eight inches; the eyes are small; the tail bushy; the head, neck, sides of the belly, thighs, and outer part of the limbs and ears, of a dirty yellow; underneath and on the sides of the lower jaw, the end of the upper lip, under the neck and belly, and the inner surface of the limbs, somewhat white; the back and sides of the body, to the tail, of a gray-yellow, which is abruptly divided from the surrounding lighter colors; the tail, a mixture of yellow and black hair, the black prevailing at the extremity; the muzzle and nails black. All travellers who have been in the countries where the jackals are found, mention the ravages they commit, and their dreadful nocturnal cries, which, answered as they are by all their companions, produce the most appalling effects. Their voice has often been described as more terrific than the howl of the hyæna or the roar of the tiger, and deprives of repose all hearers who have not been long accustomed to it. The jackal can be tamed with tolerable

facility, but always preserves an extreme timidity, which he manifests by concealing himself on hearing the slightest unusual sound, or at the sight of a person whom he is unaccustomed to. This fear is different from that of most wild animals, and he closely resembles a dog in fear of chastisement, for he will offer no resistance when he is touched. The most celebrated commentators on the Bible consider that the 300 animals, to whose tails Samson tied firebrands, were jackals. This opinion is grounded on the great number of these animals found in Syria, and on their assembling in large packs; whereas the fox is comparatively scarce, and is always solitary. The jackal has been popularly termed the *lion's provider*, from an opinion that it rouses the prey for that quadruped. The fact appears to be, that every creature in the forest is set in motion by the fearful cries of the jackals; the lion and other beasts of prey, by a sort of instinct and the call of appetite, attend the chase, and seize such timid animals as betake themselves to flight at the noise of this nightly pack. Buffon gives the following character of the jackal: "It unites the impudence of the dog with the cowardice of the wolf, and, participating in the nature of each, is an odious creature, composed of all the bad qualities of both."

JACKDAW (*corvus monedula*, Lin.). This bird is one of the crow kind, and has been celebrated for his copious vocabulary and garrulous habits. It is about 13 inches in length, with black bill; white eyes; the hinder part of the head and neck of a hoary-gray color; the rest of the plumage, of a rich glossy black above; beneath, dusky; the legs are black. The jackdaw is very common in England, where it remains the whole year; in France, and various other parts of the continent of Europe, it is migratory. It is gregarious, frequenting old towers and ruins, where it builds its nests. The female lays five or six eggs, of a greenish color, and is exceedingly assiduous in her attention to the young after they are hatched. These birds principally live on worms and the larvæ of insects, but they also appear to be capable of taking fish. Bingley states that he was witness to an instance where a jackdaw was very successful in this mode of obtaining food. It is easily tamed, and may be taught to pronounce many words with little difficulty. The jackdaws are notorious thieves, not only stealing food, but appearing to be particularly fond of shining substances, as money, &c., and have frequently occasioned sus-

pitions of theft in persons who were afterwards proved innocent. So far do they carry this propensity, that they have been known to carry off spectacles from persons who were reading.

JACKSON; the name of numerous counties and towns in the U. States. The Jacksons, Jacksonvilles, Jacksontowns, Jacksonboroughs, &c., are chiefly in the Western States, and have mostly received their names since general Jackson's successful defence of New Orleans.

JACKSON, William, a musical composer, was born in 1730, at Exeter, and received the rudiments of a classical education, with a view to his following one of the liberal professions. His taste for music displayed itself, however, so decidedly while he was yet a youth, that his friends were induced to place him under Travers, the organist of the cathedral belonging to his native city. Having passed two years in the metropolis, where he availed himself of the instructions of some of the best musicians of his day, he returned to Exeter in 1750, and, succeeding eventually to the situation of organist, there passed the remainder of his life. In 1782, he published two octavo volumes, containing *Thirty Letters on various Subjects*, which went through three editions. He also printed, in 1791, some *Observations on the present State of Music in London*. His musical compositions are still justly popular, and are distinguished by chasteness of conception, ingenuity, and truth of expression. He died in 1804.

JACKSON, Hall, an eminent physician, and the son of an eminent physician of Portsmouth, N. H., doctor Clement Jackson, was born in that town about the year 1740. He went to London to complete his medical studies, and was there honorably noticed by the faculty for an ingenious invention, by which a ball was extracted from a gun-shot wound, that had baffled the skill of all the surgeons. After his return to his native place, he speedily acquired distinction, particularly as a surgeon. He was the first who attempted, in that part of the country, the operation of couching the eye, in which he was uniformly successful. As an accoucheur, also, he was in great repute. It is said that he was the first surgeon of this country who introduced the method of healing wounds by the first intention, and that the idea was entirely original with him, although it may previously have been acted upon in Europe. The merit, likewise, of having introduced the use and cultivation of foxglove into New England, is ascribed

to him. He died Sept. 28, 1797. He published a small tract containing observations on the putrid malignant sore throat, which prevailed in New Hampshire from 1784 to 1786.

JACKSON, James, an officer in the American revolutionary army, was born at Moreton-Hampstead, in Devonshire, England, Sept. 21, 1757. In 1772, he left his native country, and settled in Georgia. When but 19 years of age, he assisted in the attack upon Savannah, in which he displayed great intrepidity, and shortly afterwards was appointed to the command of a volunteer company of light infantry. In the latter part of the year 1778, he was chosen brigade-major of the Georgia militia, and, on the capture or dispersion of that force, enrolled himself as a private in a volunteer corps formed by the officers of Georgia who had no commands. In 1780, he was badly wounded in both of his knees, in a duel with lieutenant-governor Wells, who lost his life. After his recovery, he continued to serve with distinction throughout the rest of the war, being constantly and actively employed in the most hazardous way; and when the British evacuated Savannah (July 12, 1782), colonel Jackson was ordered by general Wayne to receive the keys and take possession of the town, "in consideration of his severe and fatiguing service in advance." In the same month, the general assembly of Georgia presented him with a house and lot in Savannah, as a testimonial of their sense of his merits. As he had been educated to the law, he now commenced its practice, which soon became sufficiently lucrative to place him in possession of a competency. In 1783, he was elected a member of the legislature, and, in the following year, was appointed colonel of the first regiment of Georgia militia. In 1786, he was named brigadier-general, and was also admitted as an honorary member of the Georgia Cincinnati society. In 1788, he declined the dignity of governor of Georgia, to which he had been elected. He was then promoted to the rank of major-general of the militia of the state, and subsequently chosen by the legislature a senator in congress. Whilst attending to his duties in this last capacity, he died in Washington, Jan. 19, 1806. He was a man of great impetuosity of temper, but of undaunted courage, and unyielding devotion to liberal principles.

JACOB; the son of Isaac, and the grandson of Abraham; the last of the patriarchs, and the true ancestor of the Jews. In his

mother's womb, he quarrelled with his brother Esau, whom he held by the heel as he came into the world. Hence his name, *Jacob* (heel-holder). Being the object of maternal indulgence, he was gentle and weak, and was disposed to advance himself by cunning rather than by courage. While a youth, he purchased of his brother (who returned home weary and hungry from the chase) his birthright for a mess of pottage, and, at the instigation of his mother, disguised like Esau, he obtained from the blind and infirm Isaac, the blessing of the first-born, on which depended the inheritance of the promise made to Abraham. He was obliged to flee from the anger of his brother; and, on his way to Laban, his mother's brother, he received the first intimation that the inheritance of the divine promise had devolved on him. He saw in a dream a ladder reaching from heaven to earth, and angels ascending and descending upon it, and the guardian God of his family, whom he supposed to be in the tent of Isaac, conferred on him the blessing of Abraham. After this vision, he firmly believed that Jehovah had chosen him to be the father of a great people. This belief, and the love of Laban's daughter Rachel, were his consolation during the bitter years which he was obliged to devote to the flocks of his uncle, in order to obtain his mistress. After having served seven years, he found in his veiled bride Leah (whom he did not love), the elder sister of Rachel, and, in order to obtain Rachel, he was obliged to serve seven years more. Besides these 14 years, he served six years for a herd, and, after having repaid the deceit of his father-in-law, by an artifice which much increased his possessions (*Gen.* xxx. 27—43), he departed privately with his wives and children and property. Laban pursued him, and scarcely had Jacob appeased him, when, after 20 years' absence from home, he met the followers of his brother Esau. In this dilemma, Jacob sought relief in prayer, and a man wrestled with him all night until the morning dawned. Jacob came off victorious, though with a lame thigh, and he was called by his guardian God, whose hand he saw in this event, *Israel*, i. e. the *hero of God*, in remembrance of the contest. This afterwards became the title of his house, and the Hebrews (q. v.), from him, are called *Israelites*, i. e. *strong and stout*. Jacob now went forth with more confidence to the much dreaded meeting with his brother, and appeased his rough, but noble nature, by his submission. His

return to his father's tent made a great change in the character of Jacob. His cunning and avarice appeared to him, as it has since to his descendants, the necessary means for making his way through the difficulties of his dependent situation. Now that he had become rich, and uncontrolled master of his possessions, he showed himself worthy of his father; and if he did not resemble Abraham in greatness and power, he did in piety and tender love for his children. Yet through them he was destined to suffer the greatest afflictions. As he had two lawful wives, and, according to the custom of the country, two concubines (Bilhah and Zilpah), with 12 sons and a daughter, he could not escape domestic troubles and dissensions. His beloved Rachel died soon after his return home. A prince of the Hivites violated his daughter Dinah, and his sons revenged the injury by plundering and murdering that people. He could neither prevent this nor the incest committed by Reuben with Bilhah. Humiliation and repentance for the sins of his youth seemed now his lot. But his greatest affliction was the loss of his favorite son Joseph, whose brothers, full of envy against him, had sold him to a caravan of Ishmaelite merchants, and brought his coat, stained with blood, to their father, as a proof that he had been devoured by wild beasts. This event decided the destiny of the house of Israel. Joseph (q. v.) subsequently became, in consequence of his wisdom, the highest officer at the court of Pharaoh, and, in this capacity, recognised his brothers when they came to Egypt to purchase corn, pardoned them, and called the whole house of his father out of Canaan to dwell in a fruitful region of Egypt. The aged Jacob again embraced his favorite son, whom he had, for many years, supposed dead, and enjoyed, under his protection, a happy old age. A short time before his death, Israel collected his sons around his bed, and pronounced over each of them a blessing full of prophetic anticipations of the characters and future fate of his descendants. He bestowed the privileges of the first-born on his fourth son, Judah, Reuben having forfeited them by the crime above-mentioned, and Simeon and Levi by the murder of the Hivites. To his grandsons, Manasseh and Ephraim, the sons of Joseph, he gave privileges equal to those of his sons. The descendants of Judah composed the most powerful tribe among the Hebrews, who were hence called *Jews*. (q. v.) In conformity with Jacob's last

will, Joseph buried him in the tomb of Abraham, before Mamre, in Canaan.

JACOBI, John George, a German poet, born at Düsseldorf, 1740, son of a wealthy merchant, studied theology, in 1758, at Göttingen, and, later, in Helmstädt, then became professor of philosophy and eloquence in Halle, where he published the *Iris* (1774 to 1776, three volumes), a periodical for ladies. Joseph II appointed him professor of belles-lettres in the university of Freyburg in the Brisgau (1784). From 1795 to 1800, he published the *Ueberflüssiger Taschenbuch*, and from 1803 to 1807, the *Iris*. An edition of all his works was published at Zurich, in seven volumes. He died Jan 4, 1814.

JACOBI, Frederic Henry; a distinguished German philosopher, younger brother of the preceding, born at Düsseldorf, in 1743. His father intended him for a merchant. He early showed a religious turn, which, on his being sent to Frankfort as an apprentice, exposed him to ridicule. He therefore soon went to Geneva, where his mind was cultivated by intercourse with the most distinguished scholars, and by the study of the best productions of French literature. In consequence of the taste he had acquired for letters, he returned home with reluctance, in order to take charge of his father's business. He soon after married a lady of Aix-la-Chapelle, adorned with the finest qualities of mind and person. After having conducted the business for some time, an appointment at court was conferred on him, which relieved him from any further mercantile engagements. His brother introduced him to an acquaintance with Wieland, and he soon appeared as an author. In 1779, he was called to Munich, but soon fell into disgrace on account of his exposure of the abuses of the Bavarian system of customs. More of his writings appeared at this time, and his summers were spent at Pempelfort, in a charming country seat, which he had built. But the death of his wife interrupted this tranquil and happy life. He now applied himself, with renewed zeal and industry, to his studies, encouraged by a journey to Weimar, where he saw Göthe again, and became acquainted with Herder. His Letters on Spinoza appeared in 1785, from which time his mind was much occupied with metaphysical speculations on religious subjects. As the influence of the French revolution extended itself, he went from Düsseldorf, in 1794, to Holstein, the native country of his father, and lived part of the time at Wandsbeck and Hamburg, and

partly at Eutin. In 1801, he went to Paris, and returned to Eutin, where he intended to end his days; but, in 1804, having received an invitation to the new academy erected at Munich, he was induced to accept it on account of the loss of a considerable part of his fortune by the misfortunes of his brother-in-law. He was made president of the Bavarian academy, and retired from office at the age of 70 years, retaining, however, his salary. His last days were occupied with the collection of his works. He died March 10, 1819.—Jacobi's works are rich in whatever can attract elevated souls, yet the opinions respecting him are very different. He has been called the *German Plato*, on account of the religious glow in his metaphysical writings. But, whatever opinions may be entertained respecting his philosophy, all admit that he was a most exemplary man, truly revered by all who had the good fortune to be acquainted with him. His philosophy, among other traits, is characterized by an aversion to systems, all of which, he maintains, when consistently carried out, lead to fanaticism. His views were opposed to those of the dogmatic Mendelssohn, the critical Kant, the idealizing Fichte, and the pantheistic Schelling. Of his works, we mention Edward Allwill's *Collection of Letters* (Königsberg, 1792); *Woldemar*, a philosophical novel (Königsberg, 1794); *Letters on the Doctrine of Spinoza* (Breslau, second edition, 1789); his work on Mendelssohn's charges against these letters (Leipsic, 1786); *David Hume on Belief, or Idealism and Realism* (second edition, Ulm, 1795); *Sendschreiben an Fichte* (Hamburg, 1799). His works were published by Fleischer (Leipsic, in six volumes), to which is to be added his *Correspondence* (published by Fr. Roth, in two volumes, 1825 and 1827). Schlegel's review of Jacobi's *Woldemar* (in volume 1, page 1 to 46 of *Charakteristiken und Kritiken*) deserves the attention of the student of Jacobi. His dispute with Schelling was carried on with considerable animosity. It gave birth to Schelling's *Denkmal der Schrift von den Göttlichen Dingen* (Tübingen, 1812).

JACOBINE MONKS. (See *Dominican*.)

JACOBINS. The club of the Jacobins is one of the most surprising phenomena in history. That, in a civilized nation, so large a body of men could be found, uniting rare energy with execrable vice, political madness and outrageous cruelty, committed always in the name of virtue, is a historical phenomenon of the highest in-

terest. It is of great importance for the historian to know this period, but it requires extensive study to understand thoroughly the proceedings of this club and their causes. In the article *France*, division *France before the Revolution*, the deplorable state of that country before that event is set forth. The great mass of the people was totally uneducated and grievously oppressed, and the whole political organization so rotten, that, once touched, it necessarily fell to pieces. The religious state of the country was not unlike the political. The church was too corrupt to withstand the bold attacks of reformers, enthusiastically devoted to their new systems. The court, and the higher classes in general, had for centuries set an example of gross immorality to the people, which had produced its natural effects in vitiating their character. The opponents of the church and aristocracy, who came into power upon the overthrow of the old order of things, were wholly unacquainted with the practical administration of government, and had nothing to guide them but general philosophical principles. Under these circumstances, the excesses which the French people committed, when left to govern themselves, are matter of sorrow rather than wonder. The Jacobin club had the following origin. Before the breaking out of the revolution, particularly after the American revolution, political societies were formed in Paris (where *bureaux d'esprit*, or associations for the discussion of literary subjects, had previously been common), modelled after the London debating societies, in which political subjects were debated, and the members of which were almost universally inclined to republicanism. The example of Great Britain and the U. States was before the French. Some distinguished members of the first national assembly, principally from Bretagne, and commoners, on account of the opposition of the privileged classes and of the court party, saw the necessity of acting in concert, and of preparing for the measures of each day by previous deliberations; for which purpose they assembled in the evenings at the house of one of their body, or held a *caucus*, as we should term it. Among them was count Mirabeau, who, when the Jacobins subsequently passed the constitutional limits, seceded from them, and even denounced them. The same was the case with La Fayette. But, when both perceived that they could effect nothing in the national assembly without the consent of the Jacobins, they returned to the club, in order to influence

the assembly by this means. Meanwhile Mirabeau died, April 2, 1791. The monarchial club, under Clermont-Tonnerre, which opposed the arrogance of the Jacobins, was menaced by the mob, Jan. 27 and March 28, 1791, and finally dispersed by violence. The Jacobins now became sensible that the pike-men were their real auxiliaries. The flight of the king still more exasperated the most zealous of them, and, after the close of 1792, their principles were so exaggerated, that the original Jacobins were now expelled from the club as royalists or *modérés*; for instance, Fréron, Legendre and others. Whatever was resolved upon in these and similar meetings, was supported by all the members of the club in the national assembly. The Bretons soon admitted a greater number, in order to carry through their opinion with more certainty. Thus the members became pledged to a certain line of conduct on each question, before it was brought forward in the general assembly of national representatives, and a party was formed which, in the assembly, always voted together. Besides the intolerance towards those of different opinions, which afterwards degenerated into political proscription and persecution, personal motives had a powerful influence on the members. The private house in which they first assembled soon became no longer capable of containing the number of *friends of the revolution*, as they at first called themselves; they therefore chose for their place of meeting, at the end of 1789, the church of a suppressed Jacobin monastery, in the street St. Honoré, in the centre of Paris. This was the origin of the name *Jacobins*, though they continued for a time to term themselves the *friends of the constitution*. Their external symbol was a red cap: afterwards, a dirty dress was the token of their *sansculottism*. The revolution proceeded rapidly, and, in all the large and small towns, and, in 1793, even in some villages, similar societies were formed, which the mother society at Paris rendered dependent on itself; and thus it became enabled to direct the public opinion of all France. In 1792, the leading club, in which sometimes more than 2500 members convened, kept up a correspondence with more than 400 affiliated societies, and the number of Jacobins in all France was estimated at about 400,000. It is unnecessary to designate the principal members of the mother society, as it is well known that all men of any note, who played, or wished to play, a part in the revolution, were Jacobins.

The influence which Paris, more than any other European capital, exerts over the country, greatly increased the power of the Jacobins there. Whatever they agreed to propose in the national assembly, however daring it might be, they were sure of the assent of the other popular societies, from their connexion with the principal members of the other clubs. This naturally induced ambitious individuals, even of the higher classes, to join it, and to renounce the privileges of their order, with a view of obtaining greater consequence in the new state of things. The exaltation of the revolutionary spirit was so rapid, and so much dissension was excited among the revolutionists by the intrigues of the opposite party, aided by foreign influence, that the boldest characters formed a smaller club, which, from its place of meeting, in the church of the Franciscan friars, was called the *club of the Cordeliers* (q. v.), and which was joined by all the *exaltés*, as they were denominated. This was the proper field for the daring Danton, and here the monster Marat, from 1789 editor of the *Friend of the People*, found credence to his wild and criminal maxim, that the end justifies the means. Here *sansculottism* was fully developed in its violence, its hatred of religion, and contempt of morality and law. The circumstances of this agitated period required the boldest measures, and the most unscrupulous men were of course the most daring. The ex-Capuchin Chabot, Anacharsis Cloots, Collot d'Herbois and others carried their temerity to the highest pitch in their public speeches. As the Jacobins and the combined Orleanists and Brissotists, who labored to overthrow the crown, the former for the duke of Orleans, and the latter to establish a republic, took the right side of the apartment of the national assembly; the members of the other popular societies placed themselves on the left. Few, however, attended the assembly for the purpose of deliberation, their purpose being only to vote for what had already been agreed upon. The Jacobins and other similar clubs therefore adopted the forms of the national assembly. Presidents and secretaries were chosen, the order of the day determined, resolutions passed by a majority of votes, and seats or tribunes assigned to the audience. To such popular societies the national assembly gave a legal existence in the constitution which it drew up. From this time, the Jacobin club exercised a perfect tyranny over it. Whenever the Jacobins were not sure of the majority in

the assembly, their followers filled the tribunes of the hall of the deputies, and, by their disorderly conduct, and frequently by loud threats against individual members, discouraged all opinions or resolutions which did not coincide with those of their party. This was especially the case with respect to the king, against whom the Jacobins and Cordeliers, particularly since 1791, had circulated the grossest calumnies. The democratic Cordeliers therefore joined with the Orleans party, which labored unwittingly for the objects of the republicans, by uttering the most slanderous charges against the king and queen, and by having the lowest of the rabble on their side, and partly even in their pay. This was the reason that a popular insurrection opposed with violence, April 18, 1791, the departure of the king to St. Cloud, where he wished to spend the Easter holidays. Even the national guard, in disobedience to the order of their commander, La Fayette, refused to escort the king, who was already seated in the carriage, through the multitude. The party of the king's enemies was the more powerful, as the more moderate members had withdrawn from the Jacobin club, and the Cordeliers had again formed a junction with it, June 21. The latter, however, continued their meetings at the Capuchin monastery, in order, by being prepared and united, to manage the deliberations of the Jacobin club. After the flight of the king, June 21, 1791, they made use of the popular hatred against him, and loudly demanded the deposition of Louis and the erection of a republic. But the more moderate party, who for a long time were called *Fevillants*, from the place of their meeting, opposed their designs, and the insurrection of July 15—17, 1791, failed of its object. But, on the other hand, the retired deputies of the constituent assembly failed of dissolving the Jacobin club, before the close of its own session. When the legislative assembly, the new delegates to which had been chosen almost entirely under the influence of the Jacobins, had opened its session, Oct. 1, 1791, the friends of the king, among whom the Girondists (q. v.) were conspicuous for talents, maintained for some time the majority against his enemies (the Cordeliers), even in the Jacobin club, so that the leaders of this club—Danton, Marat, Robespierre—were obliged to disguise their projects. But their influence was augmented by the circumstance that the mayor of Paris, Pethion, and with him the municipal authorities of Paris,

composed of Jacobins, espoused their cause. Even the moderate Jacobins, and among them some of the royal ministers, inclined to the party of the enemies of the king. Thus, by the popular insurrection of May 29, 1792, they obtained a resolution of the national assembly, requiring the king to disband the body guard, decreed to him by the first assembly of the nation; but they were unable, by the insurrection of the suburbs of St. Antoine and St. Marcell of June 20, to compel the king, whom only four Swiss grenadiers protected against the attacks of the furious multitude, to revoke the veto that he had affixed to two resolutions of the national assembly; but they gained a majority of the assembly to protect from condign punishment the authors of this tumult—Pethion, Manuel and others. Meanwhile, the Jacobins, offended by a note of the Austrian minister of state, prince Kaunitz, had effected, against the will of the Cordeliers, a declaration of war against Austria, April 20, 1792; and Jacobinism soon displayed its influence in the selection of generals, in the proclamations, and in the disposition of the armies, so that neither La Fayette, in 1792, nor Dumouriez, in 1793, could excite the army against the Jacobins. But all the occurrences subsequent to June 20—the arrival of the confederates from Brest, Marseilles and other places, July 13; the attack of the Tuileries on the night of Aug. 9; the carrying of the king and his family as prisoners to the Temple by the municipal officers of Paris, Aug. 13; the massacre of the prisoners, Sept. 2—7, who were murdered without trial; the choice of new members of the convention, in September of the same year; all the acts of the national convention, from Sept. 21, 1792, to May 20, 1795, even after the 9th Thermidor (July 28, 1794), especially the execution of the king; and, finally, the establishment of the revolutionary tribunal, March 9, 1793—may be regarded as more or less effected by the Jacobins. The Jacobins were divided into two parties: agreeing as to the end, they thought differently concerning the means. Tallien, who overthrew Robespierre, was as true a Jacobin as the latter was. The enthusiastic suspected the moderate. The victory was long doubtful. Finally, the moderate were vanquished. The genuine republicans—the Girondists, or the party of the Plain—were subdued May 31 and June 2, 1793, by the more violent Jacobins, or Mountain party.* These again were gov-

* The common fate of parties in periods of

erned by the Maratists or Cordeliers, who ruled in the Jacobin club with iron sway, under the duumvirate of Robespierre the Incorruptible, and Danton, the formidable creator of the revolutionary tribunal, with Marat for an assistant. On the other hand, the moderate party was victorious in the provinces, at Marseilles, Bordeaux and Lyons. The south took up arms against the Jacobin convention. But the Mountain party succeeded in depriving the convention of power, and, on the proposal of Billaud de Varennes, the constitution gave way to the reign of terror (from August, 1793, to July, 1794). But the triumph of Jacobinism was the establishment of the committee of safety, which completed the reign of terror under Robespierre, and, by means of the revolutionary armies, suppressed rebellion with fire and sword in Vendée, and in the south. Cities like Lyons, Marseilles, Toulon, were to be demolished, and all Vendée to be transformed into a great field of blood and ashes. Fourteen armies, the guillotine, and an iron stubbornness, finally won the victory for the system of terror. France, it was said (and, for the moment, it was true), wanted only iron and bread. Not till the dictator Robespierre (q. v.) had perished under the guillotine, July 28, 1794, and with him 104 of his partisans, together with the municipal council of Paris, did the convention recover its authority. It denied to all popular assemblies any interference with the government. In vain did the Jacobin club attempt an insurrection, Nov. 11, 1794, in order to tear the monster Carrier from the sword of the law. This was its last struggle. The citizens of Paris surrounded the hall of the Jacobins till the military arrived and dispersed the meeting: Legendre closed the hall. The finishing stroke was given to this victory by the decree of the convention, that the Jacobins should not renew their

great popular commotion, whose exasperated feelings lead them to put the worst construction on each other's doings, was never more clearly exhibited than in the case of the Girondists and Jacobins. Whilst the Girondists accused the Jacobins of being in the pay of foreigners, of having admitted the English into Toulon, &c. (the Memoirs of Brissot are full of these charges), the Jacobins accused the Girondists of being for the king, &c. It must be acknowledged that the Girondists—as virtuous a party as perhaps ever existed—were merely theoretical politicians, and never could have saved France, in the state which it then was. They made the virtue of the nation the basis of their political edifice—a mistake which never could have been more serious than at that very time. Both parties, it was evident, could no longer exist together.

meetings. But their principles survived their defeat. They took advantage of the general famine to stir up a rebellion, April 1, and May 20—23, 1795. The last one brought the convention to the verge of dissolution. A member named Ferrand was murdered; all the rest took to flight, except 14 of the former Mountain party, who immediately passed a number of decrees conformably with the will of the Jacobins. Not without difficulty were the Paris committee able to quell this bloody tumult. By the disarming of the *faubourg* St. Antoine, the Jacobin party lost its principal support, as it had already lost its boldest orators—Barrere, Collot d'Herbois and Billaud de Varennes, who were transported to Cayenne, April 2, 1795. Of the 14 deputies who had desired to restore the system of terror, 6 killed themselves after their condemnation, July 17, among whom was the talented Romme. Even in Toulon, the Jacobins were at first victorious; but the troops of the convention occupied the city again, May 29. Thus the Jacobins prepared, May 20, their own downfall. Courts-martial condemned them every where to death as terrorists, and the fury of the prevailing moderate party, as it was called, outstripped the demands of justice. The constitution soon after drawn up, June 23, 1795, and the directorial government, which was actually commenced Oct. 27 of the same year, suppressed the last struggles of the Jacobins and terrorists, till the execution of Barbeuf and his associates, May 25, 1796. But, when the constitution of 1795 seemed annihilated by the victory of the directors Barras, Rewbel and Laréveillere on the 18th Fructidor (Sept. 4, 1797), Jacobinism arose anew. It sought to penetrate into the offices of the legislative councils, but found nowhere a point of union. Many of the party soon denounced republicanism. Most of them became the friends of Napoleon.—Much has been written respecting the Jacobins, and the supporters of old institutions in Europe have been in the habit of branding with the name of Jacobinism every attempt to promote the cause of liberal principles. See, for instance, Robinson's *Proofs of a Conspiracy against all the Religions and Governments of Europe*, &c. (fourth edition, London, 1798); and the prolix but empty accusation of the abbé Barruel, founded on Robinson's work, and on similar emissions of party spirit, and directed against philosophy and secret societies in general—*Mémoires pour servir à l'Histoire du Jacobinisme* (five volumes, Hamburg, 1800); also the *Lettres d'un Voyageur à l'Abbé Barruel, ou nouveaux Documents pour ses Mémoires* (London, 1800), written in a similar spirit. To learn the true character of the Jacobins, the debates of the national assembly should be studied.—In 1814, the violent ultras (q. v.) were called *white Jacobins*; whilst, in turn, the adherents of Napoleon were called *red Jacobins*. As the aristocracy, before the revolution of 1792, called the people, in contempt, *la canaille* (q. v.), so, before the revolution of 1830, every liberal, however loyal he might be, was called a *Jacobin*. Immediately after the revolution of 1830, popular societies were formed, or at least appeared openly, two of which soon gave uneasiness to government, and their proceedings were subjected to a judicial investigation. The names of these societies were *L'ami du peuple* and *Aide-toi et Dieu l'aidera*. They were abolished. An association is now forming in France, the professed object of which is to protect the country against invasion, and to guard against the return of the elder line of the Bourbons.

JACOBITES; Monophysite Christians in the East, who, oppressed and dispersed amidst the religious contests of the sixth century, were united by a Syrian monk, James (Jacobus) Bardai, or Janzalos (578), during the reign of Justinian, into a distinct religious sect. Out of gratitude to their founder, they called themselves by his name, and had, in Syria, Egypt and Mesopotamia, numerous communities, with bishops and patriarchs. On account of their separation from the Catholic church, they were glad to obtain the protection of the Saracens, who possessed themselves of the East in the middle of the seventh century. The Egyptian Jacobites, having abused the indulgence granted them by the Saracens, suffered a persecution in 1352, after which, being much diminished in numbers, and restrained in the exercise of their religion, and being gradually separated from their Asiatic brethren, they formed a distinct sect, which exists at this day in Egypt, under the name of *Copts*. (q. v.) Internal disputes and political causes occasioned a separation, about the same time, of the Abyssinian and Armenian Monophysites, from the great body of the Jacobites; and, after numerous attempts by the popes to bring them over to the Roman Catholic church, they still maintain themselves as an independent sect in Syria and Mesopotamia, and consist of about 30 or 40,000 families. These Jacobites are governed

by two patriarchs, appointed by the Turkish governors, one of whom, with the title of the *patriarch of Antioch*, has his seat at Diarbekir or Aleppo; the other, the Syrian, resides in the monastery of Saphran, near Mardin, and governs the Mesopotamian societies. Circumcision before baptism, and the doctrine of the single nature of Christ (hence their name, *Monophysites*), are common to them with the Copts and Abyssinians; but, in other respects, they deviate less than the other Monophysites from the discipline and liturgy of the orthodox Greek church.

Jacobites. In Great Britain, this name was applied to the adherents of James II (who was deposed 1688) and his posterity, and in particular to the non-jurors, whose separation from the English church consisted merely in their refusal to take the oath of allegiance to the new king; and who had their own meetings, for the purpose of praying for the Stuart family. They were most numerous in Scotland, and were very much lessened by the defeat of the Pretender (1745); and when, at length, he died at Rome (1788), they began to pray for George III.

JACOBS, Frederic Christian William, was born at Gotha, in Saxony, 1764, studied theology in Jena, in 1781, and, in 1784, went to Göttingen, where he abandoned his theological studies, in order to devote himself to philology. In 1785, he became a teacher in the gymnasium of his native city, where he published several works, and, in conjunction with several learned friends, undertook the *Character der Dichter aller Nationen* (7 vols.), as a sequel to Sulzer's *Theorie der Schönen Wissenschaften*, the continuation of which was prevented by the death and separation of the contributors. Among his other works are the following: *Bion and Moschus*, in 1795; in 1796 and 1797, *Exercitationes criticae in Scriptores veteres* (2 vols.). His *Emendationes in Anthol. Græc.* (1793) was followed by a reprint of the part of the *Analecta of Brunck*, which belongs to the *Anthology*, with indexes (Leipsic, 1794 to 1814, 8 vols.). His *Tempe* (Leipsic, 1803, 2 vols.) was prepared contemporaneously with his commentary on the *Anthology*, which he finished in 1803. Of his *Elementarbuch der Griechischen Sprache*, two volumes had appeared when he was appointed (1807) professor of ancient literature in the lyceum in Munich, and member of the new Bavarian academy. In Munich, he completed the 3d and 4th vols. of his Greek *Elementarbuch*, and, in three years, returned to Gotha, where he

was appointed chief librarian and superintendent of the cabinet of coins. Here he made out a catalogue of the valuable library, and published the Greek *Anthology*, from the only MS. which has been preserved, under the title *Anthologia ad Fidem Codicis Vaticanæ edita* (Leipsic, 1813 to 1817). The number of his philological publications is very great, besides several works of a different character, as *Alwin und Theodor, Rosaliens Nachlass, Die beiden Marien*, School for Women (7 vols., 1827), and *Tales* (5 vols., Leipsic, 1824—1827), &c.; and few writings are so well adapted, particularly for young females, as his. The first volume of his Greek Reader had passed through seven editions in 1819; and selections from the work have been introduced, as a text book, into England and the U. States; in the latter, under the title of the Greek Reader, edited by E. Everett (2d edit., Boston, 1829). In connexion with Döring, he has also published a Latin Reader.

JACQUIN, Nicholas Joseph, baron of; a celebrated botanist, who was a native of Leyden. He was born in 1727, and studied medicine at Antwerp and Louvain. The emperor Francis I sent him to the West Indies, to collect curious plants for the gardens of Schönbrunn. He commenced his voyage in 1754, and returned to Germany, after an absence of six years, with a rich store of plants from the Antilles, Jamaica, St. Domingo and Curacao. He published, in 1760, an account of his researches and the collections with which he had enriched the gardens of Schönbrunn, and of the university of Vienna, which were under his direction (*Historia Stirpium Americ.*). Two years after, appeared his catalogue of plants growing in the neighborhood of Vienna, and, in 1773, a magnificent work, entitled *Flora Austriaca*, fol., with 500 colored engravings. He engaged in the practice of medicine in the Austrian metropolis, and also occupied the professorships of chemistry and botany in the university of that city. He was created a baron in 1806. He died Oct. 24, 1817. A list of his numerous scientific publications may be found in the *Biog. Univ. and Biog. Nouv. des Contemp.*

JAFFA; and ancient Joppa, a town of Asiatic Turkey, in Syria, in the pachalic of Damascus, 16 leagues N. N. E. from Razzé or Gaza; 12 leagues N. W. of Jerusalem, and 22 leagues S. S. W. of St. Jean d'Acre, on a tongue of land advancing into the Mediterranean; lat. N. 32° 3' 25'; lon. E. 34° 46' 18'. Jaffa is situated on a hill, and is surrounded with a strong wall of

from 12 to 14 feet in height. The port is defended by two forts. There are several mosques and three convents. Vessels cannot approach the city nearer than a quarter of a league, on account of the breakers. Several consuls of European powers reside here. Pilgrims who proceed to Jerusalem frequent this city much. It contains 3650 inhabitants. The environs of Jaffa produce fruits of the best quality, particularly fine and large oranges. The Greeks and Phenicians considered Jaffa as a very ancient place, and it certainly existed 1500 years before the Christian era. *Iapho* was the Phenician name. Joppa is mentioned several times in the Scriptures. During the crusades, Joppa became the capital of a small country of the same name. Saladin burnt it, but St. Louis reestablished it. Jaffa is connected with two remarkable circumstances in the life of Napoleon: one, the bold exposure of his life by traversing the plague hospitals, and touching the poisonous sores, to give courage to his soldiers; the other, the "massacre at Jaffa." This place contained a garrison consisting of Turkish and other soldiers, in the employ of Djezzar Pacha, when general Bonaparte attacked it. A breach was made in the walls, March 7, 1799, when, according to the rules of war, the Turkish commandant was called upon to surrender; instead of which, he cut off the head of the messenger. The fortress was taken and pillaged. Bonaparte, in his letter to the directory, 23d Ventose, year VII (March 13, 1799), says, "At five o'clock, we were masters of the city, which, during 24 hours, was exposed to pillage and all the horrors of war, which never appeared to me so hideous." (See *Mémoires de Napoléon, écrits par le Général Baron Gourgaud*, vol. 2, p. 376.) 3000 men, says the duke of Rovigo, in his *Mémoires*, were made prisoners, the greater part of whom were the same soldiers to whom life and liberty had been granted at El Arish, under the condition not to bear arms against the French within a year, and to proceed to Bagdad. At the same time, news was received that the Porte, after having put in irons all the French agents, had declared war against France, and assembled an army at Rhodes, which was to be sent to Egypt. To give liberty again to these prisoners, was to send recruits to the Turks; to conduct them to Egypt under an escort, would have weakened the small army under Bonaparte's command at Jaffa. A council of war was held, and it was determined that all should be put to the sword. Even

Bourrienne, who had accompanied Bonaparte in the expedition to Egypt, states in his *Mémoires*, that the massacre of the remnant of the garrison of Jaffa was the result of the deliberations of two councils, at which M. de Bourrienne himself was present, and in which "horrible act of necessity," if he had been privileged to vote, he would have concurred, believing it to be justified by the scarcity of provisions, which were all required for the French army, and the smallness of its numerical force in the midst of a country where every individual was an enemy. The Egyptians were not, as has been often asserted, previously separated from the other prisoners. As to the poisoning those affected with the plague, M. Bourrienne, whose statements, however, cannot always be admitted unqualifiedly, says that he knows that the order for poisoning was issued; but Napoleon, according to Las Cases, told him that no opium was administered. Las Cases also gives, as the result of his own inquiries in Paris, among the principal actors on this occasion, that the proposal was made by Bonaparte to the chief physician, who declined; that no order was given to administer opium; and that there was not a grain of it, at this time, in the army. (*Mémoires de Ste. Helene*, Paris, 1823—4, page 268 et seq.)

JAGELLONES. (See *Poland*.)

JAGEMANN, Christian Joseph, librarian of the duchess Amalia of Weimar, was born 1735, in Dingelstädt, and destined by his Catholic parents for the cloister. Having escaped from the Augustine monastery, he was afterwards sent to Rome, as a penance. He lived there several years, and acquired that taste for Italian literature which made him a distinguished writer on the fine arts and literature of Italy. He is the author of a Description of Tuscany; a History of Arts and Sciences in Italy (3 vols. 8vo.); a Magazine of Italian Literature (8 vols. 8vo.); the Life of Galilei; an Italian and German Dictionary (2 vols. 8vo.); and an Italian Grammar and Chrestomathy. He died Feb. 4, 1804.

JAGGERNAUT. (See *Juggernaut*.)

JAGO, ST.; the Spanish for *St. James*. (See *James, St.*)

JAGO, ST.; one of the largest of the Cape Verd islands, one of the best cultivated, and most fertile; about 60 miles in circumference. The people in general are of a mixed color, except the officers of government and most of the priests. Cotton is produced in abun-

dance, and handsome goods are made of it, of which no small quantity is exported. The chief fruits of the island, besides a profusion of plantains, are grapes, citrons, lemons, oranges, musk and water-melons, limes, guavas, pomegranates, quinces, custard-apples, papas, &c. The chief towns are St. Jago and Praya. Lon. 23° 40' W.; lat. 15° 4' N.; population, 20,000.

JAGO DE CUBA, ST.; a town in the island of Cuba, near the south coast; lon. 76° 5' W.; lat. 20° 30' N. It is situated in the interior of a bay, on a river of the same name, about six miles from the sea, and was long considered as the capital of the island, but is much reduced from its former splendor. It is handsomely built, and contains a college, an hospital, a cathedral, two or three convents, and 16 primary schools. It has a large trade, principally in sugar and tobacco. It has a good harbor, defended by a castle called *El Morro*. Population, as given in the *Cuadro Estadístico de Cuba* (Havana, 1829), is 26,738. Its situation is unhealthy.

JAGO DE COMPOSTELLA, ST. (See *Compostella*.)

JAGO, ST., or SANTIAGO; capital of Chile. (See *Santiago*.)

JAGUAR (*felis onca*, Lin.). This name, having been applied to several different species, is apt to create some degree of confusion. The jaguar holds the same rank among the animals of the new continent as the tiger among those of the old. On the whole upper part of its body, it is of a bright yellowish fawn color, which passes on the throat, belly, and inside of the legs, into a pure white. On this ground, the head, limbs and under surface are covered with full black spots, of various sizes, and the rest of the body with annular patches, either with a black point in the centre, or formed of small black spots arranged in a circular form. This animal is found in the swampy forests of South America, especially in the neighborhood of large rivers, which he swims with great ease. Of his power of swimming, as well as of his extraordinary strength, the following circumstance, related by D'Azara, will give some idea:—A jaguar, after having attacked and destroyed a horse, carried the body of his victim to the bank of a broad and rapid river, about 60 paces distant, over which he swam with his prey, and then dragged it into the adjoining wood. Possessed of such tremendous powers, this animal is the dread of the inhabitants of the countries he infests. It is seldom, however, that he attacks the human race, though he

will not shun man when he meets with him. His favorite prey appears to be the larger quadrupeds, such as oxen, horses, sheep and dogs, which he attacks indiscriminately, and in the same treacherous manner as the rest of his tribe, uniformly singling out the last of a herd as the object of attack. When he has made choice of a victim, he springs on its back, and, placing one of his paws upon the back of the head, whilst he seizes its muzzle with the other, twists its head round with a sudden jerk, thus dislocating its spine, and instantly depriving it of life. The jaguar is generally considered as untamable, and to maintain his savage ferocity even in the captive state; but this assertion is amply contradicted by facts. The inhabitants of South America hunt the jaguar in various ways, either with a pack of dogs or by means of the *lasso*; this latter mode, however, can only be employed upon plains or open grounds. The Indians are even hardy enough to attack this formidable creature, single-handed, armed with a lance of five feet in length, and their left arm enveloped in a sheep skin; by means of which, they frustrate the first onset of the furious animal, and gain sufficient time to plunge their weapon into his body, before he has time for a second attack. Notwithstanding the strength and ferocity of the jaguar, he finds a powerful opponent in the great ant-eater, although this latter animal has no teeth to defend himself; as soon as the jaguar attacks the ant-eater, it lies down on its back, and suffocates or strangles him with its long claws.

JAHN, Frederic Louis; inventor of the modern system of gymnastics, born in 1778, in Pomerania, in the village of Lanz, near Lenzen. His father was a clergyman. He studied in Jena, Halle and Greifswalde, and exerted himself much to suppress the *Landsmanschaften* (combinations of the students, according to the sections of the country to which they belonged), which excited so much sectional feeling among them. (For an account of these *Landsmanschaften*, see *Universities*.) In 1809, he went to Berlin, and became an instructor in a private institution. At that time, the French were masters of Germany, and the best means of preparing the Germans for a contest with their oppressors constantly employed the mind of Jahn and others of his countrymen. With the view of exciting patriotic feeling among the young men of Germany, he established, in 1811, his first gymnasium. No conversation was permitted in French,

or in any language but their own; national songs were sung. Gymnastic exercises had long before been introduced into Schrepfenthal, by Guts-muths; but Jahn first conceived the idea of making gymnasia national establishments for education. (See *Gymnastics*.) During the war which soon after broke out between Germany and France, the gymnasia were suspended; but when peace was concluded, in 1814, Jahn reöpened his institutions, and exerted all his powers again to make them schools of patriotism. In the meantime, the liberal spirit which spread over the continent of Europe, found its way into the gymnasia. The German governments began to dread the effects of that love of freedom in the nation, which they had themselves used for the overthrow of the French. After the murder of Kotzebue, by the student Sand, the governments fearing or professing to fear the existence of secret combinations of a political character in the gymnasia, Jahn and many of his friends were arrested, and treated in a very arbitrary and illegal manner. In 1825, the tribunal at Frankfort declared Jahn to be innocent. Several of his scholars were also imprisoned, and, after a long confinement, liberated without trial.

JAHN, John, born at Taswitz, in Moravia, in 1750, professor of theology in the university of Vienna, died in August, 1816. Jahn published, among other works, a Chaldaic and Syriac Grammar (Vienna, 1793); Arabian Grammar (1796); Biblical Archæology (2 vols., ib., 1797 to 1800; 2d edit., ib., 1817 to 1818, part of which has been translated into English, under the title of the Hebrew Commonwealth, Andover, 1828); *Elementarbuch der Hebräischen Sprache* (2 vols., 1799); *Arabische Chrestomathie* (1802); *Introductio in Libros Sacros veteris Fœderis* (ib., 1804; 3d edit., ib., 1825); *Archæologia Biblica*, an abridgment, in Latin, of the larger work on Biblical Archæology in German (Vienna, 1804; 2d edit., Vienna, 1814), translated into English (Andover, 1st edit., 1823; 2d edit., 1827); *Grammatica Hebraica* (ib., 1809); *Vaticinia Prophetarum, Commentarius criticus in Libros Prophetarum vet. Testam.* (ib. 1815); Appendix to his theological works (1821).

JAIL, or GAOL; a prison or place of legal confinement. This word is formed from the French *geole*, and that from the barbarous Latin word *geola*, *gaola*, *gayola* (a cage); whence the Picards still call a bird-cage *gayolle*. (For some remarks on the subject of prisons, see *Prison*.)

JALAP has received its name from being principally brought from the environs of Xalapa; though the plant which produces it is abundant in other parts of Mexico, even in the immediate vicinity of Vera Cruz. It is much employed in medicine, as a very valuable purgative, and has been known in Europe since the year 1610. It is exported exclusively from Vera Cruz, to the amount of about 400,000 pounds annually. The plant is the *convolvulus jalapa* of authors, an herbaceous twining vine, having entire cordate or three to five-lobed leaves, and large white flowers with purple veins. The root, which is the part employed, is very large, sometimes weighing 50 pounds.

JAMAICA; one of the West India islands, belonging to Great Britain, and the most considerable and valuable of her possessions in that quarter. It is of an oval form, about 150 miles in length, and, on a medium, about 40 miles in breadth: lying 30 leagues west of St. Domingo. A lofty range of mountains, called the Blue mountains, runs through the whole island from east to west, dividing it into two parts, and rising in some of its most elevated peaks to 7431 feet above the level of the sea. On the north and south sides of these mountains, the aspect of the country is extremely different. On the north side of the island, the land rises from the shore into hills, which are more remarkable for beauty than boldness, being all of gentle acclivity, and commonly separated from each other by spacious vales and romantic inequalities. Every valley has its rivulet, and every hill its cascade. On the southern side of the island, the scenery is of a different nature, consisting of the stupendous ridges of the Blue mountains, of abrupt precipices and inaccessible cliffs, approaching the shore. The soil of Jamaica is in some places deep and fertile; but, on the whole, Edwards pronounces it to be an unfruitful and laborious country, compared with those which have been generally regarded as fertile. He calculates the island to contain 4,080,000 acres, of which not more than about 2,000,000 have been granted to individuals by patent from the crown. The island is well watered. There are about 100 rivers, which take their rise in the mountains, and run, commonly with great rapidity, to the sea on both sides of the island. None of them are navigable, except for boats. Black river is the deepest, and has the greatest current. There are springs, both sulphureous and chalybeate, in different parts of the country.

The climate of Jamaica on the plains is hot, the average heat from June to November inclusive, being 80° Fahr., and, in the colder season, from 70 to 80. On the higher grounds, the heat is less. The year, as in all tropical countries, may be divided between the wet and dry seasons. Sugar, indigo, cotton and coffee are the most important natural productions of Jamaica. Maize, or Indian, and Guinea corn, and rice, are also cultivated. The bread-fruit tree, with several other useful plants, has been introduced by the exertions of sir Joseph Banks. The island also abounds with different kinds of grass, of excellent quality. The several kinds of kitchen garden produce, namely, those edible roots and pulse which are in use throughout Europe, thrive well in the mountainous parts. There are also excellent vegetables of native growth. The other indigenous productions are plantains, bananas, yams of several varieties, calaloe (a species of spinach), eddoes, cassavi and sweet potatoes. Fruits are found in equal perfection and variety, and no country affords so magnificent a dessert. The mountains are also covered with extensive woods, containing excellent timbers, some of which are of prodigious growth and solidity; while others, as the well known mahogany, are well adapted for cabinet work. The indigenous quadrupeds of the island were the agouti, the peccare or Mexican hog, the armadillo, the opossum, the raccoon, the musk-rat, the alco, and the monkey. The agouti perhaps remains, and the raccoon was numerous in the time of sir Hans Sloane. The other animals are extirpated. Of the lizard, there are many varieties. The woods and marshes abound in great variety of wild fowl, some of exquisite flavor. Parrots are still found in the groves; but the flamingo is nowhere to be seen. The limit of the miasmata and pestilential atmosphere, in this zone, is supposed to be at an elevation of about 1300 feet above the sea. At that height, the air is perfectly salubrious. The high district, called *Pedro plains*, on the south-west coast of Jamaica, is said, by Bryan Edwards, to vie with any spot on the surface of the globe, in the mildness of its temperature and the purity of its air. At the estate of Cold Spring, 4200 feet above the level of the sea, he thought the climate the most delightful he had ever experienced; the thermometer seldom falls below 55°, or exceeds 70°; and many English fruits, as the apple, peach, strawberry, &c., flourish there in perfection. Jamaica is situated near the limits

of the great volcanic region of South America, and it is, in consequence, liable to earthquakes. June 7, 1802, at mid-day, an earthquake destroyed the town of Port Royal. The convulsion lasted about three minutes, when the town sunk several fathoms under water. The walls of the buildings may still be seen in calm weather. The heavy buildings throughout the island were thrown down, shattered mountains ruined many settlements, general sickness ensued, order and industry were at an end, and a mischievous confusion prevailed until the terror subsided; 3000 lives were lost by this visitation. Smart shocks are felt almost every year; in 1802, and again in 1816, they were more violent than usual. Hurricanes are more frequent, and, in many cases, more terrible and destructive than earthquakes. A succession of hurricanes desolated this and some of the neighboring islands for seven years, beginning in 1780, with the exception only of 1782 and 1783. The first, in 1780, was much the most destructive. The amount of property destroyed exceeded 2,000,000 pounds sterling. The grazing farms have lately increased much, and horned cattle are abundant. They feed on Guinea grass, which was introduced by means of seeds brought and dropped by birds, in the middle of the last century. The oxen are chiefly from the Spanish breed, small, but hardy. The sheep are said to have been originally African. The swine are smaller than those of Europe, and have short pointed ears. The pork is said to be much whiter and sweeter than that of Great Britain. The wild hog abounds in the remote woods. The chase of the wild boar is a favorite diversion of the Creole whites. The Creole horses are small, but active. The English and North American horses do not so well endure the climate. The mules do the heavy work of the plantations, and are capable of enduring twice as much fatigue as a horse. The latter is seldom used as a beast of burden. The carts and wagons are drawn by oxen. The rats are very numerous and destructive, particularly to the sugar cane; in some years, whole fields of this plant are as completely destroyed by them as if a blight had alighted on them. Eight or ten hogheads of sugar are supposed to be annually lost in this way out of every hundred. 50,000 rats have been caught on some properties in a single year, but no sensible diminution of their number takes place. The negroes eat them dressed in molasses. The legislature of Jamaica is composed of the gov-

ernor, of a council nominated by the crown, consisting of 12 gentlemen, and a house of assembly containing 43 members, who are elected by the freeholders. The most important articles of export produced in the island are sugar, rum, molasses, coffee, cocoa, cotton, indigo, pimento and ginger. Population of Jamaica at different periods :

Years.	Whites.	Free People of Color.	Slaves.
1658 . . .	4,500	—	1,400
1787 . . .	30,000	10,000	250,000

The slaves amounted in 1812, to 319,912 ; in 1817, to 346,150 ; in 1826, 331,119. This decrease is owing chiefly to the manumission of the slaves. The free people were supposed, in 1812, to amount to 40,000 ; but it is probable that the whites alone exceed that number at present, that the free people of color are as many more, and that the whole population exceeds 400,000. The capital is St. Jago de la Vega, or Spanish Town (7000 inhabitants). Kingston is the principal place in the island (35,000 inhabitants). Lon. 76° 45' W. ; lat. 18° 12' N.

Historical Sketch.—Jamaica was discovered by Columbus, May 3, 1494, in his second expedition to the new world. In June, 1503, being on his return from Veragua to Hispaniola, he was driven by tempestuous weather upon this island, where he remained upwards of 12 months, having lost his vessels, and suffered every variety of hardship. After his death, his son Diego, as hereditary viceroy of the countries discovered by his father, sent out, in 1509, to Jamaica, Juan de Esquivel, who conciliated the natives by his kindness ; and the island prospered under his administration. His successors, however, appear to have adopted the cruel policy of other governors of that period. So entire was the extermination of the Indians at Jamaica, that of a population of 60,000 persons living at the discovery of Columbus, not a single descendant was alive little more than a century and a half afterwards. In 1596, an English party took the capital, and delivered it up to pillage. Forty years afterwards, it was again invaded by a force from the Windward islands, and the town of St. Jago de la Vega was plundered. Jamaica was finally conquered by the English during the administration of Oliver Cromwell. The whole number of whites at this time did not exceed 1500, and the number of negroes was about the same. The Spanish inhabitants, rendered desperate by oppression, made a manly resistance, and for a long time the English were harassed by their vindictive incursions. Cromwell encouraged emigration,

both from Great Britain and the other colonies in the West Indies. Two or three thousand persons were engaged by Henry Cromwell in Ireland, and a considerable number embarked from Scotland for this purpose ; and, in the hands of governor D'Oyley, the government was administered with energy. In May, 1658, an attempt was made by the Spaniards to recover the island ; but the force which landed for this purpose was repulsed. About this time, the settlement became the resort of the buccaneers, who spent their immense gains in characteristic extravagance, and enriched the inhabitants. After the restoration of Charles II, Jamaica became a place of refuge for many republicans who had distinguished themselves in the civil contest. One of the first measures of the monarch was to continue D'Oyley in office, and authorize the election of a council and assembly of representatives by the people. This, which was the first establishment of a regular civil government, the island having been previously governed by martial law, took place in 1661. Afterwards, controversies arose between the assembly and the crown, which unsettled the affairs of Jamaica for a space of fifty years. At length, in 1728, a compromise was effected. The assembly consented to settle on the crown a standing revenue of £8000 per annum, on certain conditions, of which the following are the principal : 1. That the quit rents arising within the island should form part of the revenue ; 2. that the body of their laws should receive the royal assent ; and, 3. that all such laws and statutes of England, as had been esteemed laws in the island, should continue such. The most important event in the recent history of Jamaica, is the final overthrow and exile of that formidable band of fugitive negroes, who, under the name of *Maroons*, had formed an independent and hostile community in the island, for the greater part of a century. On the conquest of the island from the Spaniards, a multitude of African slaves fled to the mountains, beyond the reach of the invaders, and maintained themselves in these fastnesses in spite of all their efforts. Their numbers were continually increased by the accession of deserting slaves, and a harassing conflict was kept up with the whites, in which the latter were the principal sufferers. In 1738, an accommodation was effected, and a species of independence guaranteed to these hardy outlaws ; but at length, in 1795, hostilities broke out again. The activity and skill of the Maroons rendered them an overmatch for the great force brought

against them. In this state of things, the British resorted to the use of blood-hounds, 100 of which were imported from Cuba, and, under the direction of experienced huntsmen, were let loose upon the mountaineers, to seize and tear the unhappy fugitives. Thus hunted down like wild beasts, and hemmed in by a force too powerful to be overcome, they had no alternative but submission. The expulsion of this brave and unhappy race was determined upon, and finally carried into effect. About 600 were transported to the cold and bleak shores of Nova Scotia, where many of them perished miserably. (See Long's *Hist. of Jamaica* (3 vols., 1774); Edwards's *Hist. of the W. Indies* (1809); Roughley's *Jamaica Planter's Guide* (1820).

JAMBlichus; an eminent philosopher, a native of Chalcis, in Cœlosyria, who flourished in the beginning of the 4th century. He was the scholar of Anatolius and of Porphyry, and, having become perfect in the mysteries of the Plotinian school, he taught with vast reputation. He professed to perform wonders by the aid of invisible beings. His writings discover extensive reading, but his style is inelegant, and he borrows freely, especially from Porphyry. The school of Jamblichus produced many eclectic philosophers, who were dispersed throughout the Roman empire. The philosophical works of Jamblichus, now extant, are, the *Life of Pythagoras*; an *Exhortation to the Study of Philosophy*; *Three Books on Mathematical Learning*; a *Commentary upon Nicomachus's Institutes of Arithmetic*; and a *Treatise on the Mysteries of the Egyptians, Chaldeans and Assyrians*. St. Jerome states that he also wrote a copious commentary on the golden verses of Pythagoras. He died about 333. This Jamblichus must be distinguished from the person of the same name, to whom the emperor Julian dedicates his epistles, for Julian was scarcely born when the successor of Porphyry died. The best editions of Jamblichus are these: *De Myst. Egypt. Chald. et Assyri. nec non alii Tractatus philosophici*, Aldus (Venice, 1497); *De Myst. Egypt. nec non Porphyrii Epistola, &c.*, Gr. et Lat., Gale (Oxon. 1678); and *De Vita Pythag.*, Gr. et Lat., Kuster (Amsterdam, 1704, 4to).

JAMES, ST., called the *Greater*, the son of Zebedee and the brother of John the evangelist, was born at Bethsaida in Galilee. He was called to be an apostle, together with St. John, as they were mending their nets with their father, Zebedee, who was a fisherman. Christ gave them the name of *Bouanerges*, or *sons of thun-*

der. They then followed Christ, were witnesses with St. Peter of the transfiguration on mount Tabor, and accompanied our Lord in the garden of Olives. It is believed that St. James first preached the gospel to the dispersed Jews, and afterwards returned to Judea, where he preached at Jerusalem, when the Jews stirred up Herod Agrippa against him, who put him to a cruel death, about the year 44. Thus St. James was the first of the apostles who suffered martyrdom. St. Clement of Alexandria relates that his accuser was so struck with his constancy, that he became converted, and suffered with him. There is a magnificent church at Jerusalem, which bears the name of *St. James*, and belongs to the Armenians. The Spaniards pretend that they had St. James for their apostle, and boast of possessing his body; but Baronius, in his annals, refutes their pretensions.—*James, St.*, called the *Less*, an apostle, the brother of Jude, and the son of Cleophas and Mary, the sister of the mother of our Lord, is called in Scripture the *Just*, and the *brother of Jesus*, who appeared to him in particular after his resurrection. He was the first bishop of Jerusalem when Ananias II, high priest of the Jews, caused him to be condemned and delivered into the hands of the people and the Pharisees, who threw him down from the steps of the temple, when a fuller dashed out his brains with a club, about the year 62. He was the author of the epistle which bears his name.

JAMES, ST., OF THE SWORD (*San Jago del Espada*); a military order in Spain, instituted in 1170, by Ferdinand II, king of Leon, to stop the incursions of the Moors. The knights must prove their descent from families that have been noble on both sides for four generations, and that their ancestors have neither been Jews, Saracens nor heretics, nor called in question by the inquisition. Their vows are those of poverty, obedience, conjugal fidelity, and the defence of the immaculate conception of the holy virgin.

JAMES I, king of Scotland, of the house of Stuart, born in 1394, was the son of Robert III, by Annabella Drummond. In 1405, his father sent him to France, in order that he might escape the danger to which he was exposed by the ambition of his uncle, the duke of Albany; but, being taken by an English squadron, he and his suite were carried prisoners to the Tower of London. Here he received an excellent education from Henry IV of England, and, to relieve the tedium of captivity, ap-

plied himself to those poetical and literary pursuits, the existing evidences of which do him honor. Robert III died the following year, and James was proclaimed king; but, during the remainder of the reign of Henry IV, and the whole of that of Henry V, he was ungenerously detained in England, with a view to prevent the alliance of Scotland with France. This did not, however, prevent the apprehended result. At length, under the regency of the duke of Bedford, he was restored to his kingdom, after a detention of 18 years, at which time he was in his 30th year, and highly accomplished, both mentally and in the manly exercises. He married Joanna Beaufort, a lady of distinguished beauty, of the blood royal of England, who is thought to be the fair dame alluded to in his pleasing poem of the King's Quhair, of whom he became enamored, from beholding her in the royal gardens from the windows of his apartments, while a captive in Windsor castle. On his return to Scotland, finding that the duke of Albany and his son had alienated many of the most valuable possessions of the crown, he caused them to be convicted and executed as traitors, and their estates to be confiscated. These and some other strong measures in the resumption of improvident grants, under the regency of the dukes of Albany, were atoned for by the enactment of many good laws in his parliaments; and, as far as a lawless nobility would allow them to be put in practice, they much improved the state of society in Scotland. In 1436, he renewed the Scottish alliance with France, giving his daughter Margaret in marriage to the dauphin, and sending with her a splendid train and a large body of troops. A fruitless endeavor of the English to prevent this marriage, by intercepting the Scottish fleet in its passage, so exasperated James, that he declared war against England. He was, however, on such bad terms with his nobility, in consequence of his endeavors to curb their ambition and improve his revenue, that he was obliged to disband his army, under the apprehension of a conspiracy. He then retired to the Carthusian monastery of Perth, which he had himself founded, where he lived in a state of privacy, which facilitated the success of a plot formed against his life. The chief actors in this tragedy were Robert Graham, and Walter, earl of Athol, the king's uncle, the former of whom was actuated by revenge for the resumption of some lands improperly granted to his family, and the latter by the hopes of suc-

ceeding to the crown. By means of bribery, the assassins gained admission to the king's apartment; and an alarm being raised, the queen's ladies attempted to secure the chamber door. One of them, Catharine Douglas, thrust her arm through the staple, in which state she remained until it was dreadfully broken by the assailants. The instant the assassins got into the apartments, they dragged the king from his concealment, and, in spite of the cries and remonstrances of the queen, who in vain threw herself between them and the object of their resentment, put him to death by multiplied wounds. He perished in the 44th year of his age, and 13th of his reign, Feb. 20, 1437, leaving one son and five daughters; and his murder was punished by the deaths of the conspirators in exquisite tortures. The king, who may be said to have fallen a martyr to his attempts to abolish the anarchy and disorder which prevailed throughout his kingdom, holds no inconsiderable place in the catalogue of royal authors, by his poems of the King's Quhair, already mentioned, Christ's Kirk o' the Green, &c., the latter of which is humorously descriptive of the manners and pastimes of the age. James is also said to have been a skilful musician, and some attribute to him the composition of several of the most admired of the Scottish melodies; but of this doctor Burney is much inclined to doubt. An accurate list of the works of James I will be found in Park's edition of Walpole's Royal and Noble Authors.

JAMES V of Scotland succeeded, in 1513, at the death of his father, James IV, though only 18 months old. His mother, Margaret of England, governed during his childhood; but, at the age of 17, he assumed the reins of government, and, in 1535, married Magdalen, daughter of Francis I, who died two years after. He afterwards married Mary of Lorraine, widow of Louis of Orleans, and died Dec. 13, 1542, leaving the throne to his only child, Mary Stuart, who was born only eight days before his death.

JAMES VI of England, and VI of Scotland, was the son of Mary, queen of Scotland, by her cousin Henry lord Darnley. He was born at Edinburgh castle, in June, 1566, at the unfortunate period when his mother was at variance with her husband, and had begun to fix her affections on the earl of Bothwell. In the stormy and disgraceful times which followed, the infant prince was committed to the charge of the earl of Mar; and, in the following year, Mary being forced to resign the crown, he

was solemnly crowned at Stirling, and from that time all public acts ran in his name. His childhood was passed in civil wars, under the regencies of Murray, Mar and Morton, during which time he resided in Stirling castle, under the tuition of the celebrated Buchanan. His progress in school-learning was rapid; but, as his character opened, an instability and weakness of temper became manifest, which indicated what, in the sequel, proved to be the case, that he would become an easy prey to flatterers, and his reign be marked by injudicious favoritism. From the first, too, he seems to have imbibed those exalted notions of the royal authority and divine right which proved so injurious to his posterity. Some injudicious measures, in the spirit of these opinions, early produced a conspiracy of his nobles against him, who, in 1582, took possession of his person at Ruthven castle. A new confederacy, however, effected his liberation, and he again put himself under the direction of his favorite, the earl of Arran. The policy of queen Elizabeth, whose apprehensions from the Catholic party in favor of Mary, led her to employ every art to keep up a dissatisfied party in Scotland, was greatly assisted by the violent and unprincipled measures of Arran against the connexions of the late conspirators, many of whom fled to England. When, however, it became apparent that the life of his mother was in danger from the sentence of an English jurisdiction, James, who had hitherto treated her very irreverently, felt himself called upon to interfere. He accordingly wrote a menacing letter to Elizabeth on the subject, appealed to other courts for assistance, and assembled his nobles, who promised to assist him either to prevent or revenge that queen's injustice. When the news of the catastrophe arrived, he rejected with proper spirit the excuses of Elizabeth, and prepared for hostilities; but he was finally prevented from engaging in actual war by the inadequacy of his resources. One of the first acts of his majority was to reconcile the feuds of his nobility, whom, for that purpose, he invited to a grand festival at Holyrood house. On the threatened invasion of England by Philip II, he judiciously resolved to assist Elizabeth against the Spaniards, and was zealously supported by his people for the preservation of Protestantism, who entered into a national covenant to maintain it. In 1589, James married Anne, daughter of Frederic, king of Denmark. On his return home, after passing the winter in festivities at Copen-

hagen, he was in some danger from conspiracies against his life; and, for several succeeding years of his reign, the history of Scotland displays much turbulence and party contest. In 1600, while the country was in a state of unusual tranquillity, a very extraordinary event took place, the causes of which were never discovered. While the king was upon a hunting excursion, he was invited by the brother of Ruthven, earl of Gowrie, to ride with a small train to the earl's house at Perth. Here he was led to a remote chamber, on pretence of a secret to be communicated to him, where he found a man in complete armor; and a dagger was put to his breast by Ruthven, with threats of immediate death. His attendants, being alarmed, came to his aid. Gowrie and his brother were slain, and the king escaped unhurt. In 1603, James succeeded to the crown of England, on the death of Elizabeth, and proceeded, amidst the acclamations of his new subjects, to London. One of his first acts was to bestow a profusion of honors and titles on the inhabitants of both countries, in which, as in many other points, he displayed a contrast to the maxims of the late reign. A conference held at Hampton court, between the divines of the established church and the Puritans, afforded James an opportunity of exhibiting his skill in theological controversy, and the ill will he bore to popular schemes of church government. The meeting of parliament also enabled him to assert those principles of absolute power in the crown which he could never practically maintain, but the theoretical claim of which provided the increasing spirit of freedom in the house of commons with constant matter of alarm and contention. Although James had behaved with great lenity to the Catholics in Scotland, those in England were so disappointed in their expectations of favor, that the famous gunpowder plot was concerted in 1605, the object of which was to blow up the king and parliament. (See *Gunpowder Plot*.) His cares for reducing and improving Ireland do him honor. In 1612, he lost his eldest son, Henry, a prince of great promise, then of the age of 19; and, in the following year, the eventful marriage of his daughter Elizabeth with the elector palatine took place. About this time, the object of the weak passion of James for handsome favorites was Robert Carr, a youth from Scotland, who in a short time was raised from a court page to be earl of Somerset, and was loaded with honors and riches. The scandalous murder of

sir Thomas Overbury, by the machinations of this minion and his infamous countess, put an end to the king's partiality, although he disgracefully pardoned the principals in the murder, while he allowed their agents to be executed. The fate of Somerset paved the way for the rise of George Villiers, duke of Buckingham. (See *Buckingham*.) No circumstance in the reign of James was more unpopular than his treatment of the celebrated sir Walter Raleigh. Soon after the king's accession, that statesman, who had been opposed to the Scottish succession, engaged in a plot to set aside James in favor of the lady Arabella Stuart, for which he was tried and capitally convicted, but, being reprieved, was kept 13 years in prison. In 1615, he obtained his release by dint of money, and was allowed to set out upon an expedition to the South seas, in search of gold, with the sentence of death hanging over his head. He was unsuccessful in his objects, and James, instigated, as it is supposed, by his desire of an alliance between prince Charles and the Infanta of Spain, listened to the suggestions of the latter power, and, to the great scandal of the whole nation, sir Walter was executed upon his former sentence. The match with the Infanta, notwithstanding, failed, and Charles married Henrietta Maria, daughter of Henry IV of France, with the disgraceful stipulation, that the children should be brought up by their mother until 13 years of age; to which arrangement the future religious opinions of Charles II and James II may, perhaps, be attributed. The close of the life of James was marked by violent contests with his parliament, which prepared dreadful consequences for his successor. He was also much disquieted by the misfortune of his son-in-law, the elector palatine, who, having been induced to accept the crown of Bohemia, and to head the Protestant interest in Germany, was stripped of all his dominions by the emperor. Urged by national feelings for the Protestant cause, he was at length, in 1624, induced to declare war against Spain and the emperor; and troops were sent over to Holland to act in conjunction with prince Maurice. The defeat of this enterprise, through sickness and mismanagement, it is thought, produced the king so much uneasiness as to cause the intermittent fever by which he was soon after attacked, and of which he died in March, 1625, in the 59th year of his age.—James was not destitute of abilities nor of good intentions, but the former were not those of a ruler, and the latter were defeated by pliability and un-

manly attachments. His reign, although not unprosperous to his subjects, was inglorious in character and loss of influence, and he was neither beloved at home nor esteemed abroad. He received during his lifetime a great deal of adulation, on the score of his literary abilities; but he merits far more as an encourager of learning, than for the fruits of it displayed by himself, all of which were debased by pedantry and prejudice. Upon the whole, the good qualities of James were unstatesmanlike, and his bad ones unmanly and puerile.

JAMES II, king of England, and VII of Scotland, second son of Charles I and of Henrietta of France, was born in October, 1633, and immediately declared duke of York. After the capture of Oxford by the parliamentary army, he escaped, in 1648, at the age of 15, and was conducted to his sister, the princess of Orange. He soon after joined his mother at Paris, and, when he had reached his 20th year, served in the French army under Turenne, and subsequently entered the Spanish army in Flanders, under don John of Austria and the prince of Condé. In these campaigns he obtained reputation and experience, although with the display of no very great or shining qualities. At the restoration, he took the command of the fleet, as lord high admiral. He had previously married Anne, daughter of chancellor Hyde, afterwards lord Clarendon (see *Clarendon*), and ungenerously attempted to free himself from the union; but the marriage being satisfactorily established, he could not succeed. In 1664, he took a leading part in promoting a Dutch war, for the alleged interests of trade, and, June 3, 1665, with a powerful fleet under his command, engaged that of the Dutch under Opdam, who, with his ship, was blown up in the action, and 19 of his squadron were sunk or taken, with the loss of only one on the part of the English. In 1671, the duchess of York died, leaving her husband two daughters, who became successively queens of England. Before her death, she declared herself a convert to the Roman Catholic faith, which had been secretly that of the duke for many years, and was now openly avowed by him. This declaration produced a great impression on the people, and laid the foundation of the opposition which finally drove him from the throne. In the Dutch war of 1672, he was again placed at the head of the fleet, and, being attacked by De Ruyter, a furious engagement ensued. The Dutch fleet at length retired. A test act

being soon after passed, to prevent Roman Catholics from holding public employments, the duke was obliged to resign his command—a result which induced him to join heartily in the plot of the king and certain of his counsellors, to restore the Roman Catholic religion. In 1671, he married Mary Beatrice of Este, daughter of the duke of Modena, and, in 1677, his eldest daughter, Mary, was united to William, prince of Orange. During the violent proceedings on account of the supposed popish plot in 1679, by the advice of the king, he retired to Brussels, and a bill passed the commons for his exclusion from the throne, which was, however, rejected by the lords. When the royal party again prevailed, the duke, in 1681, was sent into Scotland, where he acted with great rigor, not to say cruelty, to the remnant of the Covenanters. It is even said that he sometimes personally assisted at the torture of criminals, and altogether exhibited himself as a man of a severe and unrelenting temper. During the whole of the remaining reign of Charles II, indeed, during which he possessed great influence in the government, he was forward in promoting all the severe measures that disgraced it. On the death of Charles II, in February, 1685, the duke succeeded, under the title of James II, and, from the time of his ascending the throne, seems to have acted with a steady determination to render himself absolute, and to restore the Roman Catholic religion. After disgusting the great majority of his subjects, by attending mass with all the ensigns of his dignity, he proceeded to levy the customs and excise without the authority of parliament. He even sent an agent to Rome, to pave the way for a solemn reëdmission of England into the bosom of that church, and received advice, on the score of moderation, from the pope himself. This conduct encouraged the rebellion of the duke of Monmouth. The unrelenting temper of James was again exhibited in the executions on this account. The legal proceedings under Jeffreys were brutal in the extreme; and it is estimated that no fewer than 251 persons suffered in the west of England by the cruel proceedings of that infamous judge, which it was the custom of the king to gibe upon, under the name of *Jeffreys' campaign*. The temporary awe, produced by this severity, even in parliament, was so great, that James was encouraged to throw off almost all disguise, both in regard to religion and government. By virtue of his assumed dispensing pow-

er, he rendered tests of no avail, and filled his army and council with Roman Catholics. He put Ireland entirely into their hands, and governed Scotland by a few noblemen who had become converts to the same faith. He gradually proceeded to a direct attack on the established church, by the formation of an ecclesiastical commission, which cited before it all clergymen who had done any thing to displease the court. A declaration of indulgence in matters of religion, was ordered to be read by the clergy in all the churches of the kingdom. Seven bishops met, and drew up a loyal and humble petition against this ordinance, which step being considered as an act of disloyalty, they were sent to the Tower. The innovations, in regard both to the religion and government, gradually united opposing interests, and a large body of nobility and gentry concurred in an application to the prince of Orange, who had been secretly preparing a fleet and an army for the invasion of the country. James, who was long kept in ignorance of these transactions, when informed of them by his minister at the Hague, was struck with terror equal to his former infatuation; and, immediately repealing all his obnoxious acts, he practised every method to gain popularity. All confidence was, however, destroyed between the king and the people. William arrived with his fleet in Torbay, Nov. 4, 1688, and landed his forces; but the remembrance of Monmouth's rebellion, for some time, prevented the people in the west from joining him, until, at length, several men of rank went over, and the royal army began to desert by entire regiments. Incapable of any vigorous resolution, and finding his overtures of accommodation disregarded, he resolved to quit the country. He repaired to St. Germain, where he was received with great kindness and hospitality by Louis XIV. In the meantime, the throne of Great Britain was declared *abdicated*, and was filled, with the national and parliamentary consent, by his eldest daughter, Mary, and her husband, William, conjointly; Anne, who had, equally with her sister, been educated a strict Protestant, being declared next in succession, to the exclusion of the infant prince. Assisted by Louis XIV, James was enabled, in March, 1689, to make an attempt for the recovery of Ireland. The battle of the Boyne, fought June, 1690, compelled him to return to France. All succeeding projects for his restoration proved equally abortive, and he spent the last years of his life in acts of ascetic de-

votion. He is even said to have entered into the society of Jesus. He died at St. Germain, September 16, 1701, at the age of 68.

JAMES III, the Pretender. (See *Stuart, James Edward Francis.*)

JAMES, Robert, an ingenious physician and medical writer, but best known as the inventor of a specific for the cure of fever, was born in 1703. He practised medicine in London, and engaged in the compilation of a medical dictionary, which appeared in 1743, in three volumes, folio. In this work James is said to have been assisted by his friend doctor Johnson, who has warmly eulogized his professional skill, in his *Lives of the Poets*. He published, in 1751, a Dissertation upon Fevers, the purpose of which was to recommend a peculiar medicine, since known by the name of *James's powder*. For this preparation he procured a patent, and sold it as a secret remedy, by which he exposed himself to the hostility of his professional brethren, who looked upon his conduct as inconsistent with the dignity of the medical character. James's powder is now known to be antimoniated phosphate of lime; and a preparation very similar to it, if not exactly the same, has long had a place in the London Pharmacopœia. The general respectability of his character as a man of science and literary acquirements, enabled him, in a great degree, to triumph over the prejudices excited by a mode of conduct which placed him so near the level of those pests of society, the majority of advertising empirics and venders of patent medicines. In 1760, he published a work entitled the *Practice of Physic* (2 vols., 8vo.), and subsequently a treatise on canine madness, and a dispensatory. One of his last literary labors was, a *Vindication of the Fever Powder*, not published till after his death, which took place in 1776.

JAMES'S PALACE, St., in Pall-Mall, London, a royal palace, stands on the site of an hospital of the same name. It has been the acknowledged town residence of the English kings since Whitehall was consumed, in 1695; but, though pleasantly situated on the north side of St. James's park, and possessing many elegant and convenient apartments, calculated for state purposes, yet it is an irregular brick building, without a single external beauty to recommend it as a palace. In the front, next to St. James's street, little more than an old gate-house appears, which serves as an entrance to a small square court, with a piazza on the

west of it, leading to the grand staircase. The buildings are low, plain and mean. Beyond this are two other courts, which have little appearance of a king's palace. The state apartments look towards the park; and this side, though certainly not imposing, cannot be pronounced mean. It is of one story, and has a regular appearance not to be found in other parts of the building. The south-east wing was destroyed by fire in 1808, and has never been rebuilt, though the whole of the palace was repaired in 1821—2—3. The rooms of the king are magnificent in a high degree. It is from this palace that the cabinet of the king of Great Britain is called the *cabinet of St. James*. Behind this palace is St. James's park.

JAMES'S PARK, St., was a complete marsh till the time of Henry VIII, who, having built St. James's palace, enclosed it, laid it out in walks, and, collecting the waters, gave the new enclosed ground and building the name of *St. James*. It was afterwards much improved by Charles II. He formed the canal, which is 2800 feet long, and 100 broad. Succeeding kings allowed the people the privilege of walking here.

JAMES RIVER; a river, in Virginia, formed by the union of Jackson's and Cowpasture rivers. At the point where it begins to break through the Blue ridge, it is joined by North river. It passes by the flourishing towns of Lynchburg and Richmond, and communicates, through Hampton road and the mouth of the Chesapeake bay, with the Atlantic. Its general course is south of east. A forty-gun ship may go¹ up to Jamestown, and, by lightening herself, to Harrison's bar, where there are 15 feet of water. Vessels of 250 tons go up to Warwick, and those of 120 to Rockets, just below Richmond. The river is navigable for bateaux 220 miles above Richmond. It opens a navigation into a country abounding in tobacco, wheat, corn, hemp, coal, &c.

JAMESON, Robert, born at Leith, near Edinburgh, is one of the most eminent British mineralogists, regius professor of natural history in the university at Edinburgh, keeper of the museum, president of the Wernerian society, member of the royal society of Edinburgh, of the antiquarian and Linnæan societies. His lectures on geology, mineralogy, and the kindred sciences, have given him much reputation, which has been increased by his writings. His first work (*Outlines of the Mineralogy of the Shetland Islands, and of the Island of Arran*) appeared in 1798.

His *Outlines of the Mineralogy of the Scottish Isles, &c.* (1800, 2 vols., 4to.), and his *Treatise on the external Characters of Minerals* (1805), which appeared with additions in 1816, embracing the Chemical and Physical Characters, are particularly distinguished. His greatest work (*System of Mineralogy*, 1804—1808, three volumes) is founded on the Wernerian theory, and is rich in original researches. In the third edition of this *System* (1820) there are some deviations from this theory, and the natural historical method is principally followed. Jameson published (1814) *Cuvier's Essay on the Theory of the Earth*, with an introduction and mineralogical notes. He has also contributed valuable papers to *Nicholson's Journal*, and *Thomson's Annals*.

JAMESTOWN; a town in James City county, in Virginia, on an island in James river, 32 miles above its mouth, 8 S. W. Williamsburg, 65 E. S. E. Richmond. This town was established in 1608, and was the first town settled by the English in the U. States. The town is now in ruins, and almost desolate. Two or three old houses, the ruins of an old steeple, a churchyard, and faint marks of the rude fortifications, are the only memorials of its former importance.

JAMI, or **DJAMY** (properly *Abd Alrahman ibn Achmed*), a celebrated Persian poet, born in 1414, had his surname from his native place *Jam*, in the province of Chorasán. He eclipsed the greatest geniuses of his time. The sultan Abu Said invited him to his court at Herat; but Jami, who was a follower of the doctrine of the Sophi, preferred the ecstasies of a mystic to the pleasures of the court. He often sat in the hall of the great mosque at Herat, where he conversed in a free and friendly manner with the common people, instructed them in the principles of virtue and religious faith, and won their hearts by his gentle and persuasive eloquence. When he died, in 1494, the whole city was in sorrow. The sultan gave him a magnificent funeral, at the public cost, and the earth, say the Persian poets, opened of itself, like a shell, to receive this invaluable pearl. He was one of the most fruitful of the Persian authors, leaving more than 40 works, mostly of a mystical character. Seven of the most interesting he joined together, under the title of the Seven Stars of the Bear. To this belongs *Jussuf and Zuleika*, one of the most entertaining works in Persian, of which *Law*, in the *Asiatic Miscellanies*, has published some fragments; also the

charming fiction *Mejnoun and Leila*, which has been translated into French by Chezy (Paris, 1805), and into German by Hartmann (Leipsic, 1807, 2 vols). His *Beharistan*, a treatise on morality, in verse and prose, is compared to Sadi's *Ghulistan*. Extracts from it have been printed by Jenisch (in the *Anthologia Persica*) and by Wilken (in the *Chrestomathia Persica*, Leipsic, 1805). According to Göthe, he combines all the excellences of the earlier Persian poets.

JAMESON, John, doctor; a philologist, minister to a congregation of seceders from the Scottish church, in Edinburgh, member of the royal society of Edinburgh, and secretary of the antiquarian society, &c. He first appeared as a poet in 1789, when he published the *Sorrows of Slavery*. In 1798, appeared his *Eternity*, a poem in which he endeavors to lead freethinkers back to the faith. He also published a number of sermons against skepticism, and opposed the views of doctor Priestley and others in several works (1795—1802). This pious scholar is highly esteemed as an antiquary and lexicographer. His *Etymological Dictionary of the Scottish Language* (1808 et seq., two volumes, 4to.) is a masterpiece of learned research. He published an abridgment of it in 1818. His *Hermes Scythicus* (1814), his *Historical Account of the ancient Culdees of Iona*, and his contributions to the *Edinburgh Philosophical Transactions*, are favorably known.

JANEIRO, RIO DE. (See *Rio de Janeiro*.)

JANICULUM (*castellum*), or **MONS JANICULUS**; one of the seven hills of Rome, on the right bank of the Tiber, also called *mons Aureus*, on account of the yellow sand (corrupted into *Montorio*). According to tradition, it received the name of *Janiculum*, because Janus first cultivated it. It afforded the most beautiful view of the city. The *pons Sublicius* connected it with the other part of Rome, to which Ancus Martius added it. The hill is now called *Gianicolo*.

JANINA. (See *Joannina*.)

JANIZARIES, "In the year 1389," says Gibbon, "the Turkish cimeter was wielded by Amurath I, the son of Orchan and the brother of Soliman. He subdued the whole province of Romania or Thrace, from the Hellespont to mount Hæmus and the verge of the capital. He marched against the Slavonian nations between the Danube and the Adriatic—the Bulgarians, Servians, Bosnians

and Albanians—and their warlike tribes, who had so often insulted the majesty of the empire, were repeatedly broken by his destructive inroads. The natives of the soil have been distinguished in every age by their hardiness of mind and body, and they were converted, by a prudent institution, into the firmest and most faithful supporters of Ottoman greatness. The vizier of Amurath reminded his sovereign, that, according to the Mohammedan law, he was entitled to a fifth part of the spoil and the captives, and that the duty might easily be levied if vigilant officers were stationed at Gallipoli to watch the passage, and to select for his use the stoutest and most beautiful of the Christian youth. The advice was followed; the edict was proclaimed; many thousands of the European captives were educated in the Mohammedan religion and arms, and the new militia was consecrated and named by a celebrated dervish. Standing in the front of their ranks, he stretched the sleeve of his gown over the head of the foremost soldier, and his blessing was delivered in these words—'Let them be called Janizaries (*yingi cheri*, or new soldiers); may their countenances be ever bright; their hand victorious; their swords keen; may their spear always hang over the heads of their enemies; and, wheresoever they go, may they return with a white face.' *White* and *black face* are common and proverbial expressions of praise and reproach in the Turkish language. *Hic niger est, hunc tu, Romane, caveto*, was likewise a Latin sentence. Such was the origin of these haughty troops, the terror of the nations, and sometimes of the sultans themselves." They were kept up by continual additions from the sultan's share of the captives, and by recruits, raised every five years, from the children of the Christian subjects. Small parties of soldiers, each under a leader, and each provided with a particular firman, went from place to place. Wherever they came, the *protogeros* assembled the inhabitants, with their sons. The leader of the soldiers had the right to take away all the youth who were distinguished by beauty or strength, activity or talent, above the age of seven. He carried them to the court of the grand seignior, a tithe, as it were, of the subjects. The captives taken in war by the pachas, and presented by them to the sultan, included Poles, Bohemians, Russians, Italians, and Germans. These recruits were divided into two classes. Those who composed the one, especially in the earlier periods,

were sent to Natolia, where they were trained to agricultural labor, and instructed in the Mussulman faith; or they were retained about the seraglio, where they carried wood and water, and were employed in the gardens, in the boats, or upon the public buildings, always under the direction of an overseer, who with a stick compelled them to work. The others, in whom traces of a higher character were discernible, were placed in one of the four seraglios of Adrianople or Galata, or the old or new one at Constantinople. Here they were lightly clad in linen or in cloth of Saloniki, with caps of Prusa cloth. Teachers came every morning, who remained with them until evening, and taught them to read and write. At a particular time, they were all circumcised. Those who had performed hard labor were made janizaries. Those who were educated in the seraglios became either spahis, or higher officers of state. Both classes were kept under a strict discipline. The former, particularly, were accustomed to privation of food, drink and comfortable clothing, and to hard labor. They were exercised in shooting with the bow and harquebuss by day, and spent the night in a long, lighted hall, with an overseer, who walked up and down, and permitted no one to stir. When they were received into the corps of the janizaries, they were placed in cloister-like barracks, in which the different *odas* or *ortas* lived so entirely in common, that the military dignities were called from their soups and kitchens. Here not only the younger continued to obey the elders in silence and submission, but all were governed with such strictness, that no one was permitted to spend the night abroad, and whoever was punished was compelled to kiss the hand of him who inflicted the punishment. The younger portion in the seraglios were kept not less strictly, every 10 being committed to the care of an inexorable eunuch. They were employed in similar exercises, but likewise in study. The grand seignior permitted them to leave the seraglio every three years. Those who chose to remain, ascended, according to their age, in the immediate service of their master, from chamber to chamber, and to constantly greater pay, till they attained, perhaps, to one of the four great posts of the innermost chamber, from which the way to the dignity of a beglerbeg, of a capitan deiri (that is, an admiral), or even of a vizier, was open. Those, on the contrary, who took advantage of this permission, entered, each one

according to his previous rank, into the four first corps of the paid spahis, who were in the immediate service of the sultan, and in whom he confided more than in his other body-guards. This institution fully satisfied expectation. An Austrian ambassador at the court of Soliman, Busbequius, whose accounts are to be perfectly relied on, speaks of the strict discipline of these janizaries, which made them appear at one time like monks, and at another like statues, of their simple dress, with only a few heron's feathers for an ornament to their heads, and of their temperate life. They would not suffer one among them, who had grown up in the indulgences of home. This corps has in many instances been the salvation of the empire. The battle of Varna, the foundation of the Ottoman greatness, would not have been gained without them. At Cassova, the Rumelian and Natolian troops had already fled before the *devil*, as they called John Hunniades, yet the janizaries obtained the victory. It was their boast that they had never fled in battle; and Lazarus Suendius, for a long time a German general against them, confessed the truth of this assertion. In all accounts they were called the nerve and the sinew of the Ottoman army. It is worthy of remark, that this invincible infantry of the East was formed about the same time (in 1367) as the not less invincible Swiss infantry. The former, however, was composed of slaves, and the latter of free mountaineers. The whole body was divided into four squadrons, each containing a certain number of *ortas* (troops). Each *orta*, in Constantinople, was supposed to have 100 men; elsewhere, 200 or 300. In time of war, the complement was 500 men. The regimental rolls produced on the pay days made the whole number of the corps 120,000; but those lists were never correct, and they comprehended all in actual service, the supernumeraries who lived by their trades and callings, and succeeded in case of vacancies, and the honorary members. Three years' service gave a right to pay in time of peace. As the government furnished only a small allowance of provisions, and clothing for 12,000 men, the privates were suffered to work at their trades. All the men of one regiment were bakers, all those of two others butchers; others, again, were all boatmen, masons, &c., and they were named accordingly. The *kulah*, or cap of dirty white felt, with a long strip hanging down behind, was the distinctive part of a janizary's dress. The Turkish

troops were required to find their own arms, but, in time of war, fire-arms were furnished to such soldiers as had none, from the arsenal at Constantinople. A firelock, pistols, mace and axe were the arms carried by the infantry; and the janizaries prided themselves in having not only well-tempered, but also richly ornamented arms. Besides the standards and horse-tails placed before the tent of the aga, or commander-in-chief, each *orta* had its own particular ensign. But a more important distinction, in the estimation of these troops, were the caldrons attached to each *orta*, two or three in number, placed under the care of the subaltern officers. The loss of these was considered as the greatest misfortune which could befall the regiment; and, if they were taken in war, all the officers were immediately cashiered, and in many cases the regiment was publicly disgraced. In these caldrons the broth was carried daily from the barracks to the different guard-houses. The police of the capital and the large towns was intrusted principally to the janizaries. Lampons and seditious papers affixed to the gates of the mosques, and conflagrations in various parts of the city, were the means by which this formidable body made its displeasure known to the sultan; but that discontent was seldom excited by any thing except the power of some unpopular minister, or the revival of a more rigid discipline. In various instances, sultans were deposed, insulted and murdered by the insurgent janizaries. This corps offers the only example in Turkish history of a public anathema or bann. After the dethronement of Osman II, a janizary of the 65th company dared to raise his hand against his fallen monarch, and strike him in the streets of the city. Amurath III punished the crime by cutting off the whole company. The memory of the crime and the punishment was renewed twice every month. On Wednesday, when the lights were distributed to the different barracks, the 65th company was called to receive their portion, but, at the second call, an officer replied, "Let their voice be silent; let them be wholly extinguished." The reforms which were attempted in this corps met with the greatest opposition on the part of the members, and produced several revolutions. It was finally entirely broken up in 1826. In May, 1826, the janizaries had declared themselves willing to have a new militia formed, but on the 14th June of that year, they rebelled on

this account; but the sultan and aga Hussein Pacha, at the head of the grand seignior's troops, repulsed the rebels; their barracks were burnt, and many were executed. The proclamation of June 17 abolished the corps forever, and laid a curse upon the name. The new troops are disciplined in the manner of the Christian nations.

JANSENIUS, Cornelius, born 1585, professor of theology at Louvain, and from 1636 bishop of Ypres in the Netherlands, owes his fame, which eclipses the name of the elder Cornelius Jansenius (bishop of Ghent; died 1571; known as a biblical critic), to the controversy, during his age, concerning the nature and efficacy of divine grace. (q. v.) Owing principally to the different representations of this doctrine by Augustine, who found it necessary to express himself differently in his dispute with the Manicheans and in that with the Pelagians, this controversy was revived at the time of the reformation. The vague and contradictory expositions of the papal court on the subject, served only to increase the contention in the Catholic church, where the pride and jealousy of the Dominicans and Augustines on one side, and the artifices of the Franciscans and Jesuits on the other, kept up this angry controversy with increasing warmth, the former contending for the strict anti-Pelagian principles of Augustine, the latter adopting a milder interpretation of them. The latter obtained a triumph over their adversaries, in 1567, by the papal bull condemning 76 propositions taken from the writings of the chancellor and inquisitor at Louvain, Michael Baius (died 1589), a learned defender of the Augustine doctrine. But the Spanish Jesuit, Lewis Molina (died 1600), went too far on the other side, in his more than semi-Pelagian commentary on the dogmatics of Thomas Aquinas. The violence of the Molinistic controversies compelled the pope, in 1598, to establish the congregation *de auxiliis* at Rome, for the examination of opinions concerning grace; and, this proving ineffectual to restore harmony, he wisely required (in 1611) of the contending parties, silence on this doctrine. Jansenius, who was an advocate of the strict Augustine system, which had always prevailed at the university of Louvain, died 1638, at Ypres, with an unblemished reputation for piety and purity of morals. But his *Augustinus*, a book in which he maintained the Augustine doctrine of free grace, and recommended it as the true orthodox belief, in opposition to the semi-Pelagianism of the Molinists, re-

kindled the controversy on its publication in 1640. The book was condemned by a bull of pope Urban VIII, in 1643; but the partisans of Jansen declared the bull to be spurious; the university of Louvain protested against it; and, even in France, it was ineffectual to suppress the applause with which many distinguished theologians received the *Augustinus*. Jansen's old friend, the abbot of St. Cyran, known as the director of the nuns of Port Royal, and a zealous opposer of the Jesuits, as well as for his mysticism and ascetic piety, John du Verger de Hauranne (died 1643), had already prepared the minds of the French theologians for Jansenism. The scholars of the Port Royal, Nicole, Perrault, Pascal (whose Provincial Letters had exposed the old sins of the Jesuits), and, above all, Ant. Arnaud (born 1612; in 1643 made doctor of the Sorbonne), men distinguished no less for religious principles and unblemished virtue than for rare learning and talents, undertook the defence of Jansenism; and the bull, in which the pope (1653) particularly condemned five propositions from the *Augustinus*, met with a strong opposition. The five propositions were these: 1. That there are certain commandments of God which good men are absolutely unable to obey, though they desire to do so, God not having given them a sufficient measure of grace. 2. That no person, in the fallen state of nature, can resist the influence of divine grace. 3. To render themselves meritorious in the sight of God, it is not requisite that men should be exempt from internal necessity, but only from outward constraint. 4. That the semi-Pelagians are heretical in maintaining that the human will is able to resist or obey the influences of divine grace. 5. That to say that Christ died for all men, is semi-Pelagianism. These propositions are really contained in the book of Jansenius, but his partisans contended that his propositions were not to be understood precisely in this sense, and that the pope was not to be regarded as infallible in determining the meaning of the writer. Hence arose the important question whether the pope, whose right to decide a point of doctrine had never been disputed, had authority to determine a historical fact. Alexander VII assumed this in 1656, in a special bull, declaring that Jansenius had understood the propositions in the sense condemned. The Jansenists were thus compelled either to recant or to secede from the Roman church. Although their protest against this unheard-of arrogance of

the Romish court, in pretending to know and to determine what a deceased author meant by expressions which admit of a double interpretation, could surprise no impartial person, it was yet regarded as an attack upon the infallibility of the pope, and drew down the displeasure of Louis XIV himself. This prince began, in 1661, to interfere in the controversy, and to persecute the Jansenists, who were already out of favor at court for preaching repentance and boldly censuring the vices of the age. But their interest with the French clergy and the influential men of the kingdom was such, that it was found impossible to force them to an unconditional subscription of the bull of Alexander VII; and, in 1668, the agreement with Clement IX, by which a conditional subscription was permitted them, and the misunderstanding between the courts of Rome and Versailles, about the affairs of Spain, obtained for them a temporary repose. They lost, in 1679, their principal patron, Anna, duchess of Longueville, celebrated in connexion with the Fronde, and sister of the great Condé; and Arnauld, to escape persecution, retired in the same year into the Netherlands, where he continued till his death, in 1694, the most zealous and esteemed defender of Jansenism; but, notwithstanding these losses, the party stood its ground under the protection of Innocent IX (died 1689), a friend of virtue and justice, who favored them as much as Louis XIV and the Jesuits opposed them. The Jansenists made themselves worthy of this protection and of the favor of the better part of the educated men in France. By endeavoring to free theology from the chains of the hierarchy, and to promote a knowledge of the Scriptures among the people; by inculcating, in the place of formal piety and lifeless ceremonies, an ardent participation of the heart and soul in the exercises of devotion, and a strict purity of life, they rendered undeniable service to the cause of true religion; and, these being considered, their excessive austerity appears at least more excusable than the looser principles of the Jesuits. But this only rendered them more odious in the eyes of the Jesuits. Jansenism, however, notwithstanding all the opposition to it on the part of the court, still continued to prevail. Father Quesnel's *Moral Observations on the New Testament*—the most universally read book of this period—gave it new support. The Sorbonne, in 1702, decided the celebrated case of conscience, whether a priest, suspected of Jansenism,

could grant absolution, in the affirmative, and the universally esteemed archbishop of Paris, cardinal de Noailles, used his power against the Jansenists no further than was necessary for the peace of the church. Clement XI at first pursued the same course, but La Chaise, confessor of Louis XIV, and his successor, the Jesuit Le Tellier, urged more violent measures, in which the king, to whose diseased fancy Jansenism and rebellion were synonymous, supported them. Quesnel, now at the head of the Jansenists, was struck from the list of the fathers of the oratory, and driven into exile. He died in 1709, at Amsterdam. In 1708, his *New Testament* was prohibited; the monastery of Port Royal des Champs, which was considered as the strong hold of Jansenism, was suppressed, by the royal police, in 1709, the nuns dispersed, the buildings demolished, and the work of persecution finally crowned by the bull *Unigenitus* (in 1713), which was forced from the pope by Le Tellier. This bull, dictated no less by gross ignorance than by furious thirst of vengeance, condemned 101 propositions from Quesnel's *Testament*, which, according to this decree, were to be understood only in a Jansenist sense, although they were, in fact, mostly scriptural sentences, forms from the liturgy, and articles of faith taken from the orthodox church fathers. The bull, therefore, only excited indignation and contempt, and increased the numbers of the Jansenists. Louis XIV died in 1715, during the efforts that were made to carry it into effect in France; and, taking advantage of the indifference of the regent, Noailles, with the majority of the French clergy, appealed from this decree of the pope to a general council. Although the Jansenists were the original authors of this appeal, yet all the appellants were not Jansenists (see *Unigenitus*); but they all met with the same treatment, the ministers Dubois and Fleury, out of complaisance to the pope, insisting on the unconditional reception of the bull, and rigorously persecuting all recusants. Great numbers of Jansenists emigrated to the Netherlands; the power of their party rapidly declined, and the miracles (cures and sudden conversions) at the tomb of the abbé de Paris (who died 1727, an early victim to voluntary penances) found credit only with enthusiasts and the Parisian populace. The fanatical excesses of their party, from 1731, helped to ruin their cause. The frenzies of the Convulsionaries, or those who were seized with spasms and ecstasies at the tomb of this wonder-

working saint—of the Secourists, who availed themselves of external means to produce convulsions, and had themselves tormented with kicks, blows and stabs—of the Naturalists and Figurists, who sometimes strove to represent the helplessness of human nature unaided by grace, and sometimes the purity of the Christian church, by indecent exposures of the body—of the Discernants and Melangists, who divided on the question whether the raptures were produced by God or the devil—these, and other fanatical sects of Jansenists and Appellants, must have necessarily made a thing, of which the world was already tired, utterly ridiculous; and the energetic measures of the police, the continual burning of Jansenist books, the frequent imprisonments, but, most of all, the very natural subsiding of enthusiasm, at last put an end to the party. From this time, Jansenism ceased to exist in France, as a public and professed doctrine. Its pure morality and strict theology always gained for it friends, however, even in that country; and a part of the clergy, by their willingness to take the constitutional oath, during the revolution, showed that they would more readily renounce the authority of the pope than their own opinion. But though the old division of the Jansenists and Molinists continued up to the latest times, in the opposition between those who took and those who refused the oath (*prêtres insermentés*), yet we find but one separate society of the Jansenists, publicly acknowledged as such, and that in the United Netherlands, which, in accordance with the resolutions of the Jansenist provincial synod at Utrecht (1763), does not separate from the Catholic church, and even respects the pope as its spiritual head, but denies his infallibility, rejects the bull *Unigenitus*, and appeals from it to a general council. It maintains, also, the doctrines of Augustine, upholds moral strictness, and regards the inward service of God as the greatest proof of piety. These Jansenists, who call themselves, by preference, the *disciples of St. Augustine*, have had, since 1723, an archbishop of their own at Utrecht, and bishops at Haarlem and Deventer, forming a clergy which, being subject to the civil authority, without riches or power, performs its duties so much the more faithfully, and exercises a well ordered church government, which they owe to the protection of Protestants, while they are still condemned by the pope as apostates and schismatics.

JANUARIUS, ST., bishop of Benevento,

was beheaded at Puzzuoli, in the beginning of the 4th century, a martyr to the Christian faith, and is honored as the patron saint of the kingdom of Naples. In honor of him, the order of St. Januarius was established there, in 1738. His body lies buried in the cathedral at Naples; but his head, with two phials of his blood, which a pious matron caught, as the tradition is, at his execution, is preserved in a separate chapel. Of this blood, the Neapolitans assert, that as soon as it is brought near the head of the saint, it begins to flow, however hardly congealed it was before. A trial is made every year, on the first Sunday of May; it is believed, that the patron saint is particularly propitious if the blood moves briskly in the phials, and appears of a clear red, while the opposite is regarded as presaging some ill to the country. The religious phrenzy which prevailed at certain festivals of the ancients, has a counterpart in the clamor for the liquefaction of the blood of St. Januarius, in the chapel of this saint, if it is delayed long after the commencement of the celebration. The writer, who was present on one of these occasions, could hardly determine whether the prevailing tone was that of prayer or imprecation. The reproaches against the saint are not a few. Sometimes, two or three days elapse before the blood becomes liquid; it is in a bottle, which stands upon the altar, and is lifted, now and then, by a priest, to show to the people whether it has become liquid or not; if it has liquefied, all throng to the altar, and, kneeling down, kiss the offered bottle, and then the priest presses it against the head of the faithful. It is said, that when the French occupied Naples for the first time, the blood would not become liquid. The French general, apprehensive of a commotion, sent to the archbishop, intimating, that if the saint's blood did not soon run, the archbishop's might. The saint had compassion on his servant, and the miracle took place in due season.

JANUS; one of the primitive deities of the Romans, entirely unknown to the Greeks, and supposed to be of Pelasgic origin. The Pelasgi believed in two supreme deities, under which they represented nature and her productions. Sometimes they were described as two different beings, male and female, and sometimes as united in a single person. This deity passed from the Pelasgi to the Latins or aborigines, and received from them the name of *Janus*. In him they worshipped the god of gods (as he is called in the

Salian hymns), the ruler of the year, and of all human fortunes, the sovereign disposer of war and peace. He was represented with a sceptre in the right hand, and a key in the left, seated on a glittering throne; he was also represented with two faces (an old and a youthful one), of which one looked forward and the other behind. Some conceive this to be a symbol of wisdom which sees into the past and the future; others a symbol of the changes of the year, the vicissitudes of the seasons, or of the several quarters of the world, as he was sometimes painted with four faces, and of his double office of opening and shutting the gate of heaven. Plutarch explained it by supposing that Janus had introduced agriculture from Thessaly into Latium, and hence one head looked towards Latium, the other towards Greece. Some believe that Janus was blended in one person with the other supreme deity of the original inhabitants of Italy, viz. Saturn. In reference to this circumstance, they relate the following story: Janus, one of the ancient kings of the Latins, taught his people agriculture, and introduced useful laws and religious institutions. Saturn, driven from his country by his children, fled to Latium, where he was well received by Janus, and made joint ruler of the kingdom. Under their reign was the golden age of Latium. Ovid, in his *Fasti* (i. 90, sqq.), says of Janus, that he was the supreme janitor in heaven and on earth, that he opened the gates of heaven to let out the day, and closed them again with the return of evening. All sorts of passages were under his care. After him, a door was called *janua*, and every open arched passage, by which people go out of one street or place into another, a *Janus*. For the same reason, he was the god of the day and the year, and from him the first month in the year still has its name. The first day of the year and the first hour of the day were sacred to him; in all solemn sacrifices he was first addressed, and had the title of *father*. Romulus erected to him the celebrated temple, which was opened at the beginning of every war, according to the ordinance of Numa, and remained open as long as the war lasted, and until peace was established in all the countries subject to Rome. The temple, however, was shut only three times in the long space of 700 years; once in the reign of Numa, again after the first Punic war, and the third time, under the reign of Augustus, A. U. C. 744.

JAPAN. At the eastern extremity of

Asia, between 31° and 49° N. lat., is situated the empire of Japan, consisting of a large cluster of islands, almost inaccessible by reason of mountains, precipitous rocks and a dangerous sea. It consists of three large islands: 1. Nippon (700 miles long, but so narrow, that its breadth in the centre is only 48 miles), divided into 49 provinces, of which the principal cities are Meaco, the residence of the *dairi*, or spiritual chief, where all the coins are struck, and all the books printed; Jeddo (with 1,680,000 inhabitants), the residence of the secular emperor (*cubo*, whose palace is 5 leagues in circumference, and forms, of itself, a considerable city), on the river Tonkay, over which is a bridge, from which the distances of all parts of the empire are calculated; and Osacco, a rich commercial city: 2. Ximo, or Kiusiu (186 miles long, and 66 broad), consisting of 9 provinces: and 3. Xicoco, or Sicofo (84 miles long, and 46 broad), containing 4 provinces. Around these great islands lie a vast number of small fertile islands and bare island-rocks, which have probably been separated from the main land by an earthquake. The superficial contents of the whole island, is estimated at 266,500 square miles, the population at 45 millions. The Japanese islands are mountainous, like the opposite coasts of the continent. The principal summit is called *Fusi*; it is covered with snow throughout the year. There are also many volcanoes. The great industry of the natives has alone made the sterile soil productive; even the steepest mountains are cultivated. Agriculture is prescribed as the principal employment, by the laws of the state. Goats and sheep are banished from Japan, the former being regarded as prejudicial to agriculture. Cotton and silk supply the place of wool. Swine are to be found only in the vicinity of Nangasacki. In general, there are but few quadrupeds in Japan, with the exception of dogs, which are abundant. The whim of a sovereign, of whom these animals were favorites, has prescribed the breeding of them by a law of the state; they are supported at the public expense. It is uncertain whether the ancients knew any thing of Japan. At the end of the 13th century, Marco Polo (q. v.) brought to Europe the first accounts of Japan, which he called *Zipangu*. In 1542, three Portuguese ships under Mendez Pinto, on a voyage to China, were driven on the Japanese coasts by a storm, though without this accident this island empire would hardly have remained unknown to the enterprise of this commercial nation, whose

navigators had collected information respecting it in China. A colony was immediately founded on the newly discovered coast, and the Jesuit Francis Xavier proceeded to Japan, to propagate Christianity. The Portuguese were allowed free access and commerce throughout the empire, especially on the island Ximo. One of their principal colonies was on the island of Firando, now Desima, or at the port of Nangasacki. Christianity prevailed extensively, though opposed by the native priests. But the secular rulers, especially the small princes who possessed portions of the country under the supremacy of the emperor, supported the new doctrine and its preachers. About the year 1616, nearly half were Christians, with many of the petty princes. The Portuguese and Jesuits had been allowed uninterrupted access to all parts of the empire as merchants and spiritual teachers, for about 50 years, when several circumstances put an end to their influence. In 1586, a revolution deprived the emperor of Japan of all temporal power, which was usurped by the cubo, the chief officer of the government, who degraded the emperor to the rank of a mere high priest. Jejas, the successor of the first usurper, made, in 1617, the sovereignty hereditary in his family. Both the new rulers were enemies of the Portuguese and missionaries, as they saw presages of danger in the close union of the new religious party, and in the influence of the Jesuits, who interfered in political affairs, and opposed the new order of things. The conduct of the Portuguese colonists was in the highest degree imprudent and licentious. The ambassadors of Portugal manifested an insupportable pride, which formed a strong contrast with the submission of the Dutch, who had obtained free intercourse with all the ports of the empire, by their assurance that they were of a different creed from the Jesuits. After many persecutions, the Portuguese, with their missionaries, were finally banished forever from the empire, in the year 1637; Christians were exposed to bloody punishments, and the ports of the empire were closed to all foreigners, except the Dutch. This persecution of the Catholic religion continued 40 years, in which time several millions of men were sacrificed. In 1665, inquisitorial tribunals were erected in all the cities of the empire, which were to renew their investigations, every year, at indefinite periods. The Dutch, who contributed not a little to this catastrophe, now took the place of the Portuguese. They and the Chinese were from this time the only na-

tions whose ships were allowed access to Japan; but both had to submit to the severest conditions, and were very much limited in their exports, and the former were so restricted after 1634, when they had given cause for suspicion, that they were only permitted to land on the island Desima, connected by a bridge with the city Nangasacki. On this island, where their storehouses were situated, lived about fifteen Dutchmen, who carried on the trade, under the closest inspection, never being permitted to enter the city without attendants, overseers and interpreters. Notwithstanding these restrictions, and the extortions to which the Dutch had to submit, in the shape of deductions from the prices agreed upon, and arbitrary changes in the value of coins, their trade with Japan seems to have been very profitable, since they have continued, to the latest times, to send thither yearly two vessels from Batavia, large three deckers, mostly belonging to Zeeland. In the middle of the 18th century, the profits of the Japanese trade were estimated at 4—500,000 guilders annually, exclusive of those arising from the sale of goods in India and Europe, and the profits of private individuals, which amounted to at least 250,000 guilders, of which half went to the council of Batavia. In the 17th century, the English founded a colony at Firando, and obtained important commercial privileges; but this commerce was soon lost, probably because the Japanese learned from the crafty Dutch, that the wife of the king of England was a Portuguese princess. All proposals for opening a trade with Japan have of late been rejected in England, because the return cargoes must consist principally of copper and camphor, and the trade in Japanese copper would prevent the exportation of the English to India. The Russians, also, to whom the Japanese government signified, as early as 1792, its aversion to a connexion with them, have lately tried, but without success, to form commercial connexions with Japan. The Japanese are a mixture of the Malay and Mongolian races, like the Chinese, from whom they have probably derived their civilization. The Japanese art, calculation of time, medicine and astrology are purely Chinese. The present inhabitants originated either from China or Corea, or from both; but, separated by tempestuous billows from the rest of the world, left to themselves, and free from the subsequent invasions of neighboring nations, they became an independent people. Their language is a dialect of the Mongolian; the

Chinese is the learned language. The Japanese language has 47 radical syllables, with a small number of regular changes. The Japanese are the most civilized and refined nation of Asia, a noble, proud people, intelligent, docile, and desirous of instruction. Art and science they value, even in nations whom they otherwise despise for their unworthy conduct, and the shameful treatment to which they are willing to submit for the sake of gain. Since the arrival of the Europeans, by whom they were taught, they have made considerable progress in several sciences. History, astronomy and medicine (in which cautery or burning with moxa, and acupuncture are practised), are pursued with zeal. Their progress, however, in medicine and geography, is comparatively small. Poetry, music and painting are held in estimation; and, in the latter, the Japanese are superior to the Chinese. Like the Chinese, they claim the invention of gunpowder and of printing. Children are sent to school at an early period, and educated with great strictness. The exportation of books is prohibited, at least, of such as contain any account of the government and country, as well as of maps and coins. The importation of religious books is as strictly forbidden. On the arrival of Dutch vessels, they are obliged to deliver their religious books in a box to the Japanese commander of Nangasacki, and receive them again on their departure. The Japanese are active, cleanly and laborious, kind, cheerful and contented, but sensual and revengeful. Their superstition is encouraged by a priestly government, opposed to all intelligence, and a numerous clergy. The government is despotic and severe, and the laws very strict. The will of the emperor is the supreme law; after it, the will of the petty princes dependent on him, who rule their provinces as strictly as he does the whole empire, and, notwithstanding their dependence, possess the right of waging war against each other. The greatest part of the inhabitants are oppressed by poverty, since the peasant is obliged to surrender half, and in many places even two thirds of his earnings to the landlord, who regards himself as the sole proprietor of the soil. In order to prevent conspiracies, each one is made, by the law of the land, the spy and surety of the others; so that every one is accountable to the state for those with whom he is in any way connected, and, in case of any offence, must suffer with them. Thus the father is accountable for his children,

the master for his servants, the neighbor for his neighbor, every society for its members. A crime is never punished by fine, but always by imprisonment and banishment, or loss of limb or life; and every punishment is inflicted with inexorable rigor on high and low. All military and civil officers, for example, are bound to slit their belly, when ordered to do so, in consequence of any crime. Such a death involves no disgrace, and hence the contempt of death among all classes of Japanese, who, in general, prefer death to ignominy. The original rulers of Japan were called *mikaddo*, from their progenitor. The high priest of Japan is still called *dairi*, which was the title of the Japanese emperors as long as they possessed spiritual and temporal powers united. Since the revolution, which deprived them of the secular power, in 1185, when Yoritomo was appointed supreme ruler of the nation, the high priest has lived at Meaco. Under the present reigning dynasty of the Djogouns, his authority has declined still more. He is in the custody of a governor, answerable to the secular emperor. In order to make himself more sure of the descendant of the ancient rulers of Japan, the crafty policy of the secular emperor has transmuted the *dairi* into a holy personage, who is visible to no human eye, at least to no man who is not in attendance on him. Whenever the *dairi*, as is very rarely the case, wishes to enjoy the fresh air in his garden, or in the inner circle of his extensive and well fortified palace, a signal is given for all to withdraw, before the bearers raise the holy prisoner on their shoulders. In this palace, where he was born, he lives and dies, without ever going out of its precincts; and not till long after his death is his name disclosed beyond them. He enjoys a rich income, consisting of merchandise and natural products, which the secular emperor increases by considerable additions, and by the proceeds of the sale of titles of honor, which belong to the *dairi*, as a prerogative. Orders are also issued in the name of the *dairi*. The secular emperor bears the title of *cubo*, and resides at Jeddo. Under him, the real, absolute sovereign of the empire, are the princes, who are responsible to him. He concedes, however, the first rank to the *dairi*, accepts from him titles of honor, and rewards the distinction thus bestowed on him by considerable presents. Formerly, the *cubo* made an annual journey to Meaco, in token of respect to the *dairi*; by degrees, these visits became less frequent, and now, as a sub-

stitute, presents are sent him by ambassadors. The daimio administers the government, with the assistance of a council of state, of six aged men. He derives his revenues, which consist merely of natural productions, from five *imperial provinces*, as they are called, and some cities, which are under his immediate jurisdiction; in addition to which, he receives presents from the territorial princes, who govern the provinces. Each of these princes possesses a hereditary sovereignty in his own province; he receives the revenue without giving an account to the emperor, and defrays the expenses of his court and his army, repairs the highways, and, in short, provides for all public expenditures; but, in token of his dependence, he is obliged to spend six months every year at the court at Jeddo, where his wives and children live in a kind of captivity, as hostages and pledges of his fidelity. The religion of the Japanese is of Hindoo origin: this is true of the older sect of the Siutos, as well as of the more modern one of Budso or Fo, which came from China. Besides these sects, there are others, more or less resembling them. The people worship a great number of inferior divinities, whose statues are placed in the temples of the great deities. The numerous clergy, and the monks and nuns, who live in a multitude of monasteries, are under the daimio. The Hindoo religion has nowhere been more disfigured by superstition and subsequent additions than in Japan. The Siuto or Confucius sect, a philosophical sect, resembles the sect of the learned in China, and despises the folly of the popular belief. The army of the Japanese consists, in time of peace, of 100,000 men, besides 20,000 horsemen, clad in armor; the infantry are protected only by helmets; their arms, bows, muskets, sabres and daggers, are excellent; they have very heavy cannon, but are even less skilful in the use of them than the Chinese. The single princes maintain, besides, 368,000 infantry and 33,000 cavalry. The navy is insignificant. The daimio formerly had large fleets, and large vessels of cedar; but now the Japanese vessels are small, at most 90 feet long, like the Chinese. In war, the Japanese display much courage, which is inflamed by martial songs and stories. The Japanese are well situated for commerce. Formerly their ships covered the neighboring seas; and before the arrival of the Europeans, they carried on a considerable trade, and an extensive navigation; they had, for example, visited the north-west coast of America, beyond Beer-

ing's straits, farther than the European navigators; they visited China and the East Indies as far as Bengal. After it had begun to be feared that foreigners would overthrow the state, and pervert the morals of the natives, all foreign commerce and navigation were prohibited. Their silk and cotton cloths, their porcelain wares, and their lackered tin-ware, with raised flowers or figures (japanned ware), are well known, and in much demand as articles of commerce; their steel-work is excellent, especially their swords and other arms, the exportation of which is strictly forbidden. Respecting the history of Japan, see Thunberg's *Travels* (from the Swedish, London, 1795), and Kämpfer's *History of Japan* (translated from the manuscripts into English, London, 1728). Compare, also, Golownin's *Narrative of his Imprisonment in Japan, 1811—13* (London, 1817), Abel Rémusat's *Mémoires sur la Dynastie régnante des Djogouns, Souverains du Japon* (Paris, 1820), which Titsingh, who was 14 years Dutch resident at Nangasacki, compiled from Japanese originals. The *Elemens de la Grammaire Japonaise* (from the Portuguese manuscript of father Rodriguez, Nangasacki, 1604, *traduits du Portug. par Landresse, expliqués par Ab. Rémusat* (Paris, 1825), is preferable to the Japanese grammars of Alvarez and Collado.*

JAPANESE CYCLE AND ÆRA. (See *Epoch*, vol. iv, page 555.)

JAPANNING is the art of varnishing in colors. All substances that are dry and rigid, or not too flexible, as woods, metals, leather, and paper prepared, admit of be-

* The following notice appeared in the newspapers in 1829: "Doctor Siebold, the resident of the king of the Netherlands in Japan, has transmitted a work to the Asiatic Society of Paris, on the origin of the Japanese, &c., containing, in an abridged form, the result of his researches during the last four years. The doctor wishes it to be published at the expense of the society, with notes and a critical preface. He writes, also, that he has collected the largest library of books which he believes was ever formed in Japan; it consists of more than 1500 volumes. His zoological museum contains more than 3000 specimens, and his botanical collection about 2000 species, in upwards of 6000 specimens. Assisted by his colleague, doctor Burger, he has also formed a complete mineralogical collection. He has visited the most remarkable cities, determined their latitude and longitude, and measured the height of several mountains. He has also established a botanical garden at Dezima, at the expense of the government of the Netherlands, in which there are now more than 1200 plants cultivated. The doctor has also presented to the king of France a collection of plants in domestic use in Japan, which he considers to be well adapted for the climate of the south of France."

ing japanned. Wood and metals require no other preparation than to have their surfaces perfectly even and clean; but leather should be securely stretched, either on frames or on boards, as its bending would crack and force off the varnish. Paper should be treated in the same manner, and have a previous strong coat of size; but it is rarely japanned, till converted into *papier maché*, or wrought into such form that its flexibility is lost. The article to be japanned is first brushed over with two or three coats of seed lac varnish, to form the *priming*. It is then covered with varnish, previously mixed with a pigment of the tint desired. This is called the *ground color*; and, if the subject is to exhibit a design, the objects are painted upon it in colors mixed with varnish, and used in the same manner as for oil painting. The whole is then covered with additional coats of transparent varnish, and all that remains to be done is to dry and polish it. Japanning requires to be executed in warm apartments, and the articles are warmed before the varnish is applied to them. One coat of varnish also must be dry before another is laid on. Ovens are employed to hasten the drying of the work. The same pigments which are employed in oil or water answer also in varnish. For painting figures, shell lac varnish is considered best, and easiest to work; it is therefore employed, in most cases, where its color permits. For the lightest colors, mastich varnish is employed, unless the fineness of the work admits the use of copal dissolved in alcohol.

JAPHETH, a Hebrew word, signifying *beautifully producing*, is the name of the third son of Noah. His descendants, according to Genesis, x, 5, peopled the isles of the Gentiles. This is supposed to mean Southern Europe, and thus Japheth is considered the ancestor of the European race, and is believed to have been the same who is called by the Greeks *Japetos*. According to Herbelot's *Bibliot. Orient.*, the Arabians give to Japheth 11 sons, who became founders of as many Asiatic tribes.

JARED; a son of Mehalaleel's, the father of Enoch. He reached the age of 962 years, according to Genesis, v, 20.

JARL, in the early history of the northern European kingdoms; the lieutenants or governors, appointed by the kings over each province. At a later period, only one jarl was appointed in each kingdom, and the title of *duke* given him, as was the case in Sweden, for instance, in 1163. In Norway, after 1308, during the reign of Hacon VII, this dignity was conferred only

on the earls of Orkney and the princes of the blood. (See the articles *Earl*, and *Al-derman*.)

JASMINE; a beautiful genus of plants belonging to the *diandria monogynia* of Linnaeus. The corolla is funnel-shaped, and the fruit a two-seeded berry. Thirty species are known, which are shrubs, often with long, twining branches, bearing simple or compound leaves, and beautiful and delightfully fragrant flowers. Two species are natives of the south of Europe.

JASON; son of Æson, king of Iolchos, in Thessaly, and of Polymeda (according to some writers, of Polymete, Alcimede, Polypheme, &c.); a hero of ancient Greece, celebrated for his share in the Argonautic expedition, before which he had distinguished himself in the Caledonian hunt. His instructor was the Centaur Chiron, who educated most of the heroes of that time. His father abdicated the government of Iolchos before Jason was of full age; on which account his uncle Pelias administered the government as his guardian. The causes of Jason's expedition to Colchis are commonly related thus: Pelias, Jason's uncle, sent an invitation to all his relations, and, among the rest, to Jason, to attend a solemn sacrifice to Neptune. When Jason, on his way to Iolchos, came to the river Evenus (Enipeus, Anaurus), he found Juno there, in the form of an old woman, who requested him to carry her over. He complied with her request, but lost one of his shoes in the mud. Pelias, who had been warned by an oracle, that he should be deprived of his kingdom and life by the man who should come to the sacrifice without shoes, was alarmed at the sight of Jason in this condition, and asked him what he would do to the man designated by the oracle as his murderer. Jason, at the suggestion of Juno, replied, that he should send him to Colchis, after the golden fleece; and he was accordingly sent. Another account relates that Pelias had deprived his brother of his throne, and that Jason, when 20 years old, having asked the oracle how he could get possession of his lawful inheritance, was directed to go to the court of Pelias, at Iolchos, in the dress of a Magnesian, with a leopard's skin on his shoulders, and armed with two lances. On the way, Jason lost his shoe in the manner above related. All were surprised at his appearance, and Pelias, who did not recognise him, demanded who he was. Jason answered boldly that he was the son of Æson, caused himself to be shown the dwelling of his father, and spent five days

there with his relations, Pheres, Neleus, Admetus, Amythron, Acastus and Melampus, in celebrating his return. They then went together to Pelias, and demanded of him his abdication. Pelias dared not refuse, but answered that he would resign, after Jason had performed a glorious achievement by bringing back the golden fleece to Thessaly, as the oracle and the shade of Phryxus had commanded, since his age would not permit him to go himself. On the voyage (see *Argonauts*), Jason had two children by Hypsipyle of Lemnos—Euneus and Nebrophonus (Deipylus). By the assistance of Medea (q. v.), he successfully accomplished the object of his voyage, and returned, carrying home Medea as his wife, after long wanderings. Here he avenged the murder of his parents and his brother, by putting Pelias to death. But he was unable to retain possession of the throne, and was obliged to resign it to Acastus, son of Pelias, and flee, with his wife, to Corinth. Here they passed 10 happy years, till Jason, wearied of Medea, fell in love with Clauce, (Creusa according to some accounts), daughter of Creon, king of Corinth, married her, and put away Medea and her children. Medea, having revenged herself on her hated rival, fled from the wrath of Jason, in her car drawn by dragons, to Ægeus, king of Athens, after she had put to death Mermerus and Pheretus, her sons by Jason. According to some, Jason killed himself in despair; but others relate that, after passing a miserable, wandering life, he came to his death by the following accident: As he was sleeping one day, overcome by weariness, on the sea-shore, in the shade of the vessel which had borne him to Colchis, a beam fell upon him and crushed him. Others say that he was afterwards reconciled to Medea, and returned with her to Colchis, where, after the death of his father-in-law, he ruled many years in peace.

JASPER. (See *Quartz*.)

JASSY (Jash), capital of Moldavia, about 18 miles distant from the Pruth, 200 miles east of Oczakow, 370 north of Constantinople, has a citadel, and is the residence of the hospodar and seat of the Greek metropolitan of Moldavia, with 25,000 inhabitants. The Roman Catholics are allowed the free exercise of their religion, and there are some Jews here. The city is an open place, and was almost destroyed by the janizaries Aug. 10, 1822: it now contains hardly 2000 houses. The streets are paved with logs. The excellent canvass made here, and the wine of Catana-

pou, in the neighborhood, are exported from Jassy to Constantinople. This city was taken by the Russians, in 1733 and 1769, but each time restored to the Turks on the conclusion of peace. In 1788, it fell into the power of the Austrians; and, Jan. 9, 1792, the peace between Russia and Turkey was signed here. (See *Russia*.) In 1821, the unfortunate Alexander Ypsilanti here raised the standard of the Greek Hetaria against the Turks. (See *Hetaria*, and *Greece, Revolution of*.)

JACCOURT, Louis, chevalier de, one of the contributors to the French *Encyclopédie*, born 1704, at Paris, received the rudiments of his education in Geneva, passed three years at Cambridge, and studied medicine in Holland, under Boerhaave and Tronchin, but determined to practise it only for the benefit of the poor. On his return home, he devoted himself entirely to letters, and, at the instance of D'Alembert, he prepared the articles relating to medicine and natural philosophy for the *Encyclopédie*. He also contributed other articles, which are among the best in the work. Feeling his strength decline, he retired to Compiègne, where he died, 1779. Besides his treatises in the *Encyclopédie*, he published various works, some original and some translated, on medical subjects. The manuscript of a universal medical dictionary, which he had prepared, in six volumes, folio, was lost on its way to the publisher in Amsterdam, in a vessel that was shipwrecked on the coast of North Holland.

JAUNDICE is a disease of which the distinguishing peculiarity is, that the whole skin becomes yellow. It proceeds from some disease about the liver, or its communication with the bowels. The internal symptoms are those of all disorders of the digestive organs, except that the water is dark and loaded with bile, while the bowels appear to be deprived of it. The yellow color is first perceptible in the whiter parts of the body, as the white of the eye, &c., and soon overspreads the whole body. There is often an extreme itching and prickling over the whole skin. After the disease has continued long, the color of the skin becomes gradually deeper and darker, till the disease becomes, at last, what is vulgarly called the *black jaundice*. This appearance arises from the bile being retained, from various causes, in the liver and gall-bladder, and thus being absorbed and circulated with the blood. It may be produced by obstacles to the passage of the bile of various kinds, and is often suddenly induced by a violent fit of passion,

or more slowly by long continuance of melancholy and painful emotions. It is a very common figure of speech to say, that "a person views a thing or a person with jaundiced eyes;" but this is founded in a mistake; for it is not true, that jaundice communicates such a color to the transparent part of the eye, as to affect the color of objects. The above phrase is therefore inappropriate.

JAVA; a large island in the Eastern seas, situated between 6° and 9° of S. lat., and between 105° and 115° of E. lon. from Greenwich. It extends from east to west, and is 642 miles in length, its greatest breadth 128 miles, and its average breadth 95. To the south and west, its shores are washed by the Southern Indian ocean; to the north-west lies the island of Sumatra, from which Java is separated by a strait, 20 miles wide in the narrowest part, known by the name of the *Straits of Sunda*; to the north is Borneo; to the north-east, Celebes; and, on the east, the islands of Bali and Madura, from the former of which it is separated by a narrow passage, called the *Straits of Bali*. The island is divided nearly in its whole length by a range of mountains, running almost east and west, and rising to their greatest elevation towards the centre; but the range is much broken. In several hills of the great range of mountains are the craters of volcanoes, which formerly raged with fury, and poured forth torrents of lava; but, at present, none are known to be in activity, though many emit smoke after heavy rain. The most considerable rivers are the Joana, and the Sedani, or Tangerang. On the bank or bar before Batavia, the flood rises about six feet, and higher at spring tides. High and low water likewise occur only once in 24 hours. The island is traversed from east to west by a great military road, 700 miles in extent, constructed by general Daendels, a governor of the island, before it was taken by the English. The year, as is usual in tropical climates, is divided into the dry and the rainy seasons; or into the east, which is called the *good monsoon*, and the west, or the *bad monsoon*. Thunder storms are very frequent, especially towards the conclusion of the monsoons, when they occur almost every evening. The heat of the climate is various. Along the sea-coast, it is hot and sultry. At Batavia, from July to November, the thermometer generally stands, in the hottest part of the day, between 84° and 90°, which it rarely exceeds; and, in the greatest degree of

coolness in the morning, it is seldom lower than 76°. In some parts, particularly among the hills, and in many of the inland towns, it is often so cold as to make a fire desirable. Java possesses a soil of extraordinary luxuriance and fertility. In the forests, especially in those on the north-east coast, is found an abundance of lofty trees, fit to be converted into masts, while forests of teak supply the place of oak for building ships, adapted to all purposes. Palms and cocoa-trees are found in great variety, and are distinguished by their luxuriant growth, sometimes reaching to the astonishing height of 150 feet. Fruits of all kinds are also abundant, many of them of exquisite delicacy and flavor. In the high ground in the interior, they are found to dwindle and degenerate, in that equinoctial climate. The various kinds of plants and great abundance of herbs found in Java, would afford ample scope for the researches of the botanist, as flowers exhale their perfumes at all seasons of the year. Garden-plants are produced in great variety, such as endives, cauliflowers, beans, cabbages, pompions, melons, patacas or water-melons, yams, potatoes, &c. Maize, or Indian corn, is a favorite article of food with the natives, who eat it roasted. The natural fertility of the soil of Java supersedes the necessity of laborious tillage. The staple produce of the island is rice. Sugar, to the amount of 10,000,000 of pounds annually, is also made. Pepper is produced in great abundance and perfection; also indigo of a very superior quality. Cotton is cultivated in almost every part of the island; and the coffee plantations are extremely luxuriant. The soil is also very favorable to the growth of tobacco. There are many other herbs and plants, both medicinal and balsamic, that are but imperfectly known to Europeans. Wheat and barley are only grown in small quantities, on the hilly tracts, chiefly in the middle parts of the island. Oats and Bengal grain thrive likewise in those parts of the island, and would be produced in great abundance, were due attention given to their culture. The domestic animals in Java are buffaloes, and cattle of every description, and sheep, goats and pigs. Game, however, does not abound here so much as in other countries, though hares and rabbits are pretty common; and deer and antelopes are also plentiful. The horses, which are very numerous throughout the island, are small, but active. Wild hogs and monkeys are found in all the jungles. The forests abound with tigers, as powerful and as large as in Bengal. A

species of black tiger, which is often found, is very ferocious. The rhinoceros is sometimes met with. Snakes are found here, as in all other hot countries, in great numbers, and of various kinds. Some of these are from 25 to 30 feet in length. Lizards of all kinds, from the variable chameleon to the guana tribe, frequent the bushes, trees, and roofs of the houses. Scorpions and mosquitos abound in the marshes. There are, besides, various other sorts of dangerous and disgusting vermin. Of the numerous feathered tribes found in Java, we may remark the cassowary, a very large and powerful bird. White eagles have been seen here; and every kind of bird of prey is continually on the wing. The aquatic tribe is equally diversified, and the extensive fisheries along this great line of coast are highly productive. At the mouths of the rivers, numbers of alligators, or caymans, are continually lurking for their prey. In the several bays, numerous sharks swim about the ships; and many animals, undescribed in natural history, abound in these seas. There are manufactures of cotton, leather and saddlery; also of iron, brass and tin. The principal articles of exportation are rice, sugar, coffee, pepper, indigo, teak timber and planks, spices (which are brought from the Moluccas), tin (from Banca), cotton, yarn, salt, edible birds' nests. The imports are European articles, of every description—chintzes and muslins, silks, hats (which are a favorite dress with the Chinese and native chieftains), boots and shoes, cabinet ware, fire-arms, gunpowder, shot, haberdashery, hosiery, mathematical and musical instruments, &c. The population of Java is composed almost entirely of natives, of a variety distinct from the Malays and other inhabitants of the neighboring islands. In 1815, it amounted to 5,000,000, of whom one fortieth part were Chinese, Europeans, Arabs, Malays and Hindoos. The Javanese are small, with a yellow complexion, flattened nose, high cheek bones, and thin beard. Their language is entirely different from the Malay; their religion Mohammedanism. Numerous monuments of antiquity, buildings, statues, &c., prove that they were once in a more flourishing condition than at present. Three quarters of Java are in the power of the Dutch, whose immediate authority extends over three fifths of the inhabitants. The other quarter is divided between two native sovereigns in the south-east part of the island. Java was discovered by the Portuguese in 1510. They made some settle-

ments there, which were taken possession of by the Dutch, towards the end of the sixteenth century. The latter, having conquered the native princes, made the island the centre of their Indian possessions in 1619. In 1811, the English made themselves masters of it, but restored it at the peace of Paris, in 1814. The exactions and oppressions have since occasioned several insurrections of the natives.—See Raffles's *History of Java* (second edition, London, 1830); Crawford's [British resident at Java] *Indian Archipelago*; Marchal's *Descript. Géog., Hist. et Commerciale de Java* (Brussels, 1826.) Blume, a Dutch naturalist, who resided nine years in the island, has published a view of the vegetable kingdom of Java.

JAY (*garrulus*). These birds are distinguished from the crows by having their bill rather short and straight; upper mandible somewhat inflected at tip; lower, navicular; head feathers, erectile; wings, not reaching to the tip of the tail; colors, brilliant. The European jay (*G. glandarius*) and the blue jay of the U. States (*G. cristatus*) are the most prominent and best known of this genus, and possess much the same characteristics, both in their wild and their domesticated state. They are lively, petulant, and rapid in their movements; exceedingly noisy, having a faculty of imitating harsh sounds. When an owl or other bird of prey appears in the woods, they utter piercing cries, and assemble in great numbers to attack the common enemy. The same thing takes place when they see a sportsman, whose purpose they often frustrate by their vociferous noise. They indulge no familiarity with man, and discover all that shyness and timidity so natural to thieves. In a domestic state, they are restless, and much addicted to transports of anger. When confined in a cage, therefore, they soon lose their beauty, by the perpetual rubbing and breaking of their feathers. Like their kindred, the magpie and jackdaw (q. v.), they can be taught a variety of words and sounds, particularly those of a harsh and grating character, as that of a saw, &c.

JAY, Antoine, a French author, born Oct. 20, 1770, at Guitres, in the department of Gironde, studied at Niort, where Fouché was his instructor; after which he applied himself to law at Toulouse. After having devoted himself to the cause of freedom in the revolution, and been imprisoned and released, he travelled in the U. States, where he remained seven years. After his return in 1802, Fouché engaged

him in the education of his children. His prize essays rendered him known, and, in 1812, he became principal editor of the *Journal de Paris*, and published the *Glauteur*, or *Essais de Nicolas Freeman*. In 1813, the professorship of history at the Athenæum was conferred on him, and his inaugural discourse exposed the errors of the romantic school (*genre romantique*), and of the fashionable prejudice in favor of the middle ages, which France has received from Germany. During the hundred days (1815), he was a member of the chamber of deputies, and employed his influence with leading men in favor of many royalists and proscribed persons; he always voted in the chamber on the liberal side, and therefore demanded a revision of the *Additional Act*, so called, and of the *senatusconsults*, which were more favorable to despotism than to the constitutional system. After the battle of Waterloo, he proposed, in the chamber, to prince Lucien, to persuade Napoleon to abdicate. The address of the French government to the French army before the gates of Paris, was drawn up by him, and carried by him, with Arnault, Garat, &c. on the 29th of June, to Davoust's head-quarters at La Villette. After the second restoration, Jay published his *Histoire du Ministère du Cardinal Richelieu* (1815, 2 vols.), and was afterwards, with Étienne, the editor of the *Constitutionnel* and of the *Minerve*. In 1822, he was summoned with Jouy (see *Jouy*) to answer for some imprudent expressions in the *Biographie des Contemporains*, of which they were associate editors; he was acquitted at the first trial, but Jouy was sentenced to be imprisoned and fined. Both appealed, and the court of appeals condemned both to imprisonment, Jan. 29, 1823. He and Jouy spent the period of their imprisonment at St. Pélagie, where they wrote the popular work *Les Hermîtes en Prison, ou Consolations de St. Pélagie, par E. Jouy et A. Jay* (6th ed., Paris, 1826, 2 vols.). After their deliverance, they published also, in conjunction, *Les Hermîtes en Liberté* (1824).

JAY, John, an eminent American jurist and statesman, was born in the city of New York, Dec. 1, 1745, old style. After receiving the elements of education at a boarding-school, and under private tuition, he was placed, when fourteen years of age, at King's (now Columbia) college, in his native place. Here he devoted himself principally to those branches which he deemed most important in reference to the profession of the law, upon the study of which he entered after receiving his

bachelor's degree. In 1768, he was admitted to the bar, and in 1774 was chosen a delegate to the first American congress, which met at Philadelphia, and was placed on a committee with Mr. Lee and Mr. Livingston, to draft an address to the people of Great Britain. It was prepared by Mr. Jay, and is one of the most eloquent productions of the time. In the two following years, he was reelected, and served on various important committees. In 1776, he was chosen president of congress. In 1777, he was a member of the convention which framed the constitution of New York; and the first draft of that instrument proceeded from his pen. The following year, when the government of New York was organized, he was appointed chief-justice of that state. In 1779, we find him again a member of congress, and in the chair of that body. From this, however, he was removed in the same year by his appointment as minister plenipotentiary to Spain. The objects of Mr. Jay's mission were to obtain from Spain an acknowledgment of our independence, to form a treaty of alliance, and to procure pecuniary aid. With regard to the first two points, no satisfactory conclusion was obtained, and in the summer of 1782, Mr. Jay was appointed one of the commissioners to negotiate a peace with England, at the same time that he was authorized to continue the negotiation with Spain. In conjunction with Mr. Adams and doctor Franklin, he resolved to disobey the instructions of congress to follow in all things the advice of the French minister, count de Vergennes, who was embarrassing the negotiation with England, in order to benefit France at the expense of the U. States, and accordingly they signed a treaty with the British minister, without his knowledge. The definitive treaty having been signed in September, 1783, he soon afterwards resigned his commission as minister to Spain, and, in May, 1784, embarked for the U. States. He was then placed at the head of the department for foreign affairs, in which office he continued until the adoption of the present constitution, when he was appointed chief-justice of the U. States. In 1787, he received a serious wound in the forehead from a stone, when acting as one of a volunteer corps to preserve the peace of the city at the time of the doctors' mob. He was, in consequence, confined to his bed for some time, a circumstance which obliged him to discontinue writing for the *Federalist*, to which he had already contributed the 2d, 3d, 4th and 5th numbers. The only other number in the vol-

ume from his pen is the 64th, on the treaty-making power. In 1784, he was sent as envoy extraordinary to Great Britain, and concluded the treaty which has been called after his name. Before his return in 1795, he had been elected governor of his native state—a post which he occupied until 1801. In that year, he declined a reëlection, as well as a reëppointment to the office of chief-justice of the U. States, and retired to private life. The remainder of his days was passed in devotion to study, particularly theological, and to practical benevolence. He died May 17, 1829, universally honored and beloved. He was a man of inflexible firmness of mind in the performance of duty, of great discernment, extensive information, and fine talents as a writer. Although rather cautious with strangers, with friends he was affable and frank; economical in his expenses, he was at the same time generous towards every object worthy of his bounty. The letters between him and general Washington, various extracts of which are contained in the fifth volume of Marshall's history, exhibit the elevated place he held in the confidence and esteem of that illustrious man.

JEDDO, JEDO, or YEDDO; a city of Japan, capital of the empire, at the head of a large bay, at the mouth of a river, in the S. E. of Nippon; 160 E. by N. of Meaco. Lon. 140° E.; lat. 36° 30' N. The population has heretofore been estimated at 1,000,000. In 1812–13, the Japanese told to Golownin, that the population exceeded 10,000,000; that in the principal streets were 280,000 houses, each containing from 30 to 40 persons; and that in the city there were 36,000 blind men. Meaco was formerly the capital, and is still the residence of the spiritual emperor; but the civil and military emperor has his residence at Jeddo. This city is 7 miles long, 5 broad, and 20 in circuit. It has no walls, except those which surround the palace. It is said not to be surpassed in magnificence by any city in Asia, since, besides the usual accompaniments of a capital, all the princes and great men are obliged to make it their residence for half of the year. It contains, therefore, many splendid palaces, which stand by themselves, surrounded by large court-yards and stately gates, and, though built only of wood, and one story high, are distinguished by varnished staircases and large and finely ornamented apartments. The palace of the emperor may be properly called a great fortified city. It is situated in the heart of the general city, said to be 5 leagues in circuit, surrounded with walls and ditches, and

containing several fortified buildings, which have the appearance of castles. The outer part is composed of streets, containing many palaces, in which reside the princes of the blood, ministers, and other public functionaries. In the centre is the emperor's palace, the body of it being of only one high story, but adorned with a square tower raised many stories high. Unlike all other Japanese structures, it is well built of freestone, and is surrounded by a wall of the same material. The city is intersected by branches of the river, and by canals. It is the seat of an extensive commerce, and has many flourishing manufactures. It is greatly exposed to the ravages of fire. In 1658, 100,000 houses were reduced to ashes in 48 hours.

JEFFERSON, Thomas, the third president of the U. States of America, was born April 2, old style, 1743, at Shadwell, in Albemarle county, Virginia, and was the eldest of eight children. His father, though his education had been entirely neglected in early life, being a man of strong mind, acquired, by subsequent study, considerable information. He died when the subject of our sketch was about twelve years old, having previously given him every means of knowledge that could be procured, and left him a considerable estate. After going through a course of school instruction, young Jefferson entered the college of William and Mary, where he remained for two years. He then commenced the study of law under the guidance of the celebrated George Wythe, by whom, in 1767, he was introduced to its practice, at the bar of the general court of the colony, at which he continued until the revolution. In 1769, he was elected a member of the provincial legislature from the county where he resided, and made a fruitless effort, in that body, for the emancipation of the slaves. By this time, a spirit of opposition had been excited in the colonies to the arbitrary measures of the British government; and when the governor of Virginia dissolved the general assembly, in 1769, in consequence of the sympathy which was displayed by the majority of its members with the feelings which had been manifested in Massachusetts, they met, the next day, in the public room of the Raleigh tavern, formed themselves into a convention, drew up articles of association against the use of any merchandise imported from Great Britain, and signed and recommended them to the people. They then repaired to their respective counties, and were all reëlected, except those few who had declined assent-

ing to their proceedings. In 1773, Mr. Jefferson associated himself with several of the boldest and most active of his companions in the house ("not thinking," as he says himself, "the old and leading members up to the point of forwardness and zeal which the times required"), and with them formed the system of committees of correspondence, in a private room of the same Raleigh tavern. This system was adopted as the best instrument for communication between the different colonies, by which they might be brought to a mutual understanding, and a unity of action produced. This end was completely accomplished, as well as another object—that of exciting throughout the colonies a desire for a general congress. It was accordingly resolved that one should be held, and in Virginia a convention was assembled for the purpose of choosing delegates. Of this convention Mr. Jefferson was elected a member; but, being suddenly taken ill on the road, as he was repairing to Williamsburg, its place of meeting, he sent on to its chairman, Peyton Randolph, a draught of instructions which he had prepared as proper to be given to the delegates who should be sent to congress. It was laid on the table for perusal; but, though approved by many, the sentiments contained in it were too bold to be adopted by the majority: "tamer sentiments," in his own words, "were preferred, and, I believe, wisely preferred; the leap I proposed being too long, as yet, for the mass of our citizens." The position that he maintained was, that the relation between Great Britain and the colonies was exactly the same as that between England and Scotland, after the accession of James, and until the union, and the same as her relations with Hanover, having the same executive chief, but no other necessary political connexion. In this doctrine, however, the only person who entirely concurred with him was George Wythe, the other patriots "stopping at the half-way house of John Dickinson, who admitted that England had a right to regulate our commerce, and to lay duties on it for the purposes of regulation, but not of raising revenue." Though the paper was not adopted, the convention, nevertheless, caused it to be printed in a pamphlet form, under the title of a Summary View of the Rights of British America. Having found its way to England, it was taken up by the opposition, and, with a few interpolations of Mr. Burke, passed through several editions. It procured for its author considerable reputation, and likewise the dangerous honor of

having his name placed on a list of proscriptions, in a bill of attainder, which was commenced in one of the houses of parliament, but was speedily suppressed. June 21, 1775, Mr. Jefferson took his seat for the first time in congress, having been chosen to fill the place of Peyton Randolph, who had resigned. In this new capacity, he persevered in the decided tone which he had assumed, always maintaining that no accommodation should be made between the two countries, unless on the broadest and most liberal basis. After serving on several committees, he was at length appointed a member of that, whose report has linked the name of its author with the history of American independence. June 7, 1776, the delegates from Virginia, in compliance with the instructions of the convention, moved that congress should declare the United Colonies free and independent states. This gave rise to a warm and protracted debate; for as yet there were many who continued to cling to the hope of a peaceful adjustment. In the course of the discussion, it appearing that several colonies were not yet fully ripe for separation, it was deemed prudent to defer the final decision of the question for a short time; and, in the mean while, a committee was appointed to prepare a declaration of independence, consisting of John Adams, doctor Franklin, Roger Sherman, Robert R. Livingston and Mr. Jefferson. The last named gentleman was requested to draw up the paper, which he did, and it was reported to the house, after receiving a few alterations from doctor Franklin and Mr. Adams. On the first of July, the day selected for deciding upon the original motion of the Virginia delegates, it was carried in the affirmative by a large majority, and two or three days afterwards by a unanimous vote. The declaration of independence was then brought before the house, by which, though generally approved, it was, in some respects, modified. Those passages, especially, which conveyed censure upon the people of England, were either greatly softened, or entirely omitted, as the idea was still entertained that the colonies possessed friends in England, whose good will it would be proper to cherish; and a clause reprobating the slave-trade was cancelled, in complaisance to some of the Southern States, who were largely engaged in the traffic. The debates respecting the declaration occupied three days, on the last of which, the 4th of July, it was signed by every member present, except John Dickinson, who deemed

a rupture with the mother country, at that moment, rash and premature. September 2, 1776, Mr. Jefferson retired from his seat in congress, and, on the 7th of October, took his place in the legislature of Virginia, of which he had been elected a member from his county. In this situation, he was indefatigable in his labors to improve the imperfect constitution of the state, which had been recently and hastily adopted, before a draught of one which he had formed on the purest principles of republicanism, had reached the convention, which was deliberating at Richmond. The chief service which he performed was as a member of a commission for revising the laws, consisting, besides himself, of Edmund Pendleton, George Wythe, George Mason and Thomas Ludwell Lee, by whom no less than 126 bills were prepared, from which are derived all the most liberal features of the existing laws of the commonwealth. The share of Mr. Jefferson in this great task was prominent and laborious. June 1, 1779, he was chosen the successor of Mr. Henry, in the office of governor of the state, and continued in it for two years, at the end of which period he resigned, "from a belief," as he says, "that, under the pressure of the invasion under which we were then laboring, the public would have more confidence in a military chief, and that, the military commander being invested with the civil power also, both might be wielded with more energy, promptitude and effect, for the defence of the state." General Nelson was appointed in his stead. Two days after his retirement from the government, he narrowly escaped capture by the enemy, a troop of horse having been despatched to Monticello, where he was residing, for the purpose of making him prisoner. He was breakfasting, when a neighbor rode up at full speed with the intelligence that the troop was ascending a neighboring hill. He first sent off his family in a carriage, and, after a short delay for some indispensable arrangements, mounted his horse, and, taking a course through the woods, joined them at the house of a friend—a flight in which it would be difficult to discern any thing dishonorable, although it has been made the subject of sarcasm and reproach without end, by the spirit of party. June 15, 1781, Mr. Jefferson was appointed minister plenipotentiary, in conjunction with others, to negotiate a peace then expected to be effected, through the mediation of the empress of Russia; but he declined, for the same reason that had

induced him, in 1776, to decline also the appointment of a commissioner, with doctor Franklin, to go to France in order to negotiate treaties of alliance and commerce with that government. On both occasions, the state of his family was such that he could not leave it, and he "could not expose it to the dangers of the sea, and of capture by the British ships, then covering the ocean." He saw, too, that "the laboring oar was really at home," especially at the time of his first appointment. But, in November, 1782, congress, having received assurances that a general peace would be concluded in the winter and spring, renewed the offer which they had made the previous year; and this time it was accepted; but the preliminary articles being agreed upon before he left the country, he returned to Monticello, and was chosen (June 6, 1783) a member of congress. It was during the session at Annapolis, that, in consequence of Mr. Jefferson's proposal, an executive committee was formed, called the *committee of the states*, consisting of a member from each state. Previously, executive and legislative functions were both imposed upon congress; and it was to obviate the bad effects of this junction, that Mr. Jefferson's proposition was adopted. Success, however, did not attend the plan; the members composing the committee quarrelled, and, finding it impossible, on account of their altercations, to fulfil their duties, they abandoned their post, after a short period, and thus left the government without any visible head, during the adjournment of congress. May 7, 1784, congress, having resolved to appoint another minister, in addition to Mr. Adams and doctor Franklin, for negotiating treaties of commerce with foreign nations, selected Mr. Jefferson, who accordingly sailed from Boston July 5, and arrived in Paris August 6. Doctor Franklin was already there, and Mr. Adams having, soon after, joined them, they entered upon the duties of their mission. They were not very successful, however, in forming the desired commercial treaties, and, after some reflection and experience, it was thought better not to urge them too strongly, but to leave such regulations to flow voluntarily from the amicable dispositions and the evident interests of the several nations. In June, 1785, Mr. Adams repaired to London, on being appointed minister plenipotentiary at the court of St. James, and, in July, doctor Franklin returned to America, and Mr. Jefferson was named his successor at Paris. In the February

of 1786, he received a pressing letter from Mr. Adams, requesting him to proceed to London immediately, as symptoms of a better disposition towards America were beginning to appear in the British cabinet, than had been manifested since the treaty of peace. On this account, he left Paris in the following March, and, on his arrival in London, agreed with Mr. Adams on a very summary form of treaty, proposing "an exchange of citizenship for our citizens, our ships, and our productions generally, except as to office." At the usual presentation, however, to the king and queen, both Mr. Adams and himself were received in the most ungracious manner, and, after a few vague and ineffectual conferences, he returned to Paris. Here he remained, with the exception of a visit to Holland, to Piedmont and the south of France, until the autumn of 1789, zealously pursuing whatever was beneficial to his country. September 26 of that year, he left Paris for Havre, and, crossing over to Cowes, embarked for the U. States. November 23, he landed at Norfolk, Va., and, whilst on his way home, received a letter from president Washington, covering the appointment of secretary of state, under the new constitution, which was just commencing its operation. He soon afterwards received a second letter from the same quarter, giving him the option of returning to France, in his ministerial capacity, or of accepting the secretaryship, but conveying a strong intimation of desire that he would choose the latter office. This communication was produced by a letter from Mr. Jefferson to the president, in reply to the one first written, in which he had expressed a decided inclination to go back to the French metropolis. He then, however, consented to forego his preference, and, March 21, arrived in New York, where congress was in session, and immediately entered upon the duties of his post. It would be altogether inconsistent with our limits to give a minute account of the rest of Mr. Jefferson's political life. This could not be done without writing the history of the U. States for a certain period. We must, therefore, content ourselves with stating that he continued to fill the secretaryship of state, until the 31st of December, 1793, when he resigned. From that period until February, 1797, he lived in retirement. In this year he was elected vice-president of the U. States, and, in 1801, was chosen president, by a majority of one vote over his competitor, Mr. Adams. At the expiration of eight years, he again retired to

private life, from which he never afterwards emerged. The rest of his life was passed at Monticello, which was a continued scene of the blandest and most liberal hospitality. Such, indeed, was the extent to which calls upon it were made, by foreigners as well as Americans, that the closing year of his life was embittered by distressing pecuniary embarrassments. He was forced to ask permission of the Virginia legislature to sell his estate by lottery, which was granted. Shortly after Mr. Jefferson's return to Monticello, it having been proposed to form a college in his neighborhood, he addressed a letter to the trustees, in which he sketched a plan for the establishment of a general system of education in Virginia. This appears to have led the way to an act of the legislature, in the year 1818, by which commissioners were appointed with authority to select a site and form a plan for a university, on a large scale. Of these commissioners, Mr. Jefferson was unanimously chosen the chairman, and, Aug. 4, 1818, he framed a report, embracing the principles on which it was proposed the institution should be formed. The situation selected for it was at Charlottesville, a town at the foot of the mountain on which Mr. Jefferson resided. He lived to see the university—the child of his old age—in prosperous operation, and giving promise of extensive usefulness. He fulfilled the duties of its rector until a short period before his death, which occurred on the 4th of July, 1826, the fiftieth anniversary of the declaration of independence, and within the hour in which he had signed it.—In person, Mr. Jefferson was tall and well formed; his countenance was bland and expressive; his conversation fluent, imaginative, various and eloquent. Few men equalled him in the faculty of pleasing in personal intercourse, and acquiring ascendancy in political connexion. He was the acknowledged head of the republican party, from the period of its organization down to that of his retirement from public life. The unbounded praise and blame which he received as a politician, must be left for the judgment of the historian and posterity. In the four volumes of his posthumous works, edited by his grandson, Thomas Jefferson Randolph, there are abundant materials to guide the literary or historical critic in forming an estimate of his powers, acquirements, feelings and opinions. His name is one of the brightest in the revolutionary galaxy. Mr. Jefferson was a zealous cultivator of literature and science. As early

as 1781, he was favorably known as an author, by his *Notes on Virginia*. He published, also, various essays on political and philosophical subjects, and a *Manual of Parliamentary Practice, for the Use of the Senate of the U. States*. In the year 1800, the French national institute chose him one of their foreign members. The volumes of posthumous works, in addition to an auto-biography of the author to the year 1790, consist principally of letters from the year 1775 to the time of his death, and embrace a great variety of subjects.

JEFFREY OF MONMOUTH. (See *Geoffrey*.)

JEFFREY, Francis, lord advocate of Scotland, son of George Jeffrey, one of the deputy clerks of session in Scotland, was born in Edinburgh, Oct. 23, 1773. He received the rudiments of education at the high school of Edinburgh, and, in 1787, was entered at the university of Glasgow. After having remained at Glasgow four years, he removed to Oxford, and was admitted of Queen's college, in 1791. In 1795, he was called to the bar. His second wife, whom he married in 1814, is a daughter of Mr. Wilkes of New York, and grand-niece of John Wilkes. In very early life, Mr. Jeffrey displayed the promise of splendid talents, and his father spared no pains in his education. While Mr. Jeffrey resided at Edinburgh, he engaged actively in the literary societies of that city, and was one of the most conspicuous members of the Speculative Society. At the bar, the success of Mr. Jeffrey was, however, long doubtful, and it was not for many years that he acquired extensive practice. Yet his abilities as an advocate are of the first order. In acuteness, promptness and clearness; in the art of illustrating, stating and arranging; in extent of legal knowledge; in sparkling wit, keen satire, and strong and flowing eloquence, he has few equals. But though Mr. Jeffrey is known at home as the head of the Scottish bar, it is to his literary character that he owes his general reputation. As the editor and one of the leading writers in the Edinburgh review, for a period of 30 years (the editorship has lately passed to Mr. Napier), he has been a sort of literary despot, rendered terrible by his merciless sarcasm and acute criticism. His duel, or rather meeting, with Moore, and the effect of the review of lord Byron's *Hours of Idleness* on the noble bard, are well known. The articles of Mr. Jeffrey are numerous, and relate principally to belles-lettres. His *Essay on Beauty*, in the Supplement to the *Ency-*

clopædia Britannica, is a fine specimen of philosophical criticism. The political tone of the Review has ever been decidedly of a Whig character, which, at the time of its appearance, was by no means popular in Scotland, where the Whigs were then few. In 1830, Mr. Jeffrey received the place of lord advocate of Scotland, and was returned to parliament. Here he advocated the great measure of parliamentary reform, in an able speech, but lost his seat by the decision of the committee on contested elections. Some account of Mr. Jeffrey may be found in Peter's Letters to his Kinsfolk, and in the *New Monthly Magazine* (April, 1831).

JEFFREYS, George, lord baron Wem, commonly known by the name of *Judge Jeffreys*, was born towards the beginning of the 17th century. He was entered at the Middle Temple, and, by attending an assize during the plague, when few barristers could be met with, he was allowed to plead, although not formally admitted, and continued to practise unrestrained until he attained the highest employments in the law. Soon after commencing his professional career, he was chosen recorder of London; and to this advancement, and the influence it procured him, may be attributed his introduction at court, and appointment of solicitor to the duke of York. A willing instrument of all sorts of measures, his farther promotion, at such a period, was rapid, and he was appointed, successively, a Welsh judge and chief-justice of Chester, and created a baronet. When parliament began to prosecute the *abhorrrers* (or church and court party, so called from their address to the king, Charles II, expressing their *abhorrence* of those who endeavored to encroach on the royal prerogative), he resigned the recordership, and was appointed chief-justice of the king's bench. On the accession of James II, he was one of the advisers and promoters of all the oppressive and arbitrary measures of his reign; and, for his sanguinary and inhuman proceedings against the adherents of Monmouth, was rewarded with the post of lord high chancellor (1685). He usually, however, showed himself an able and impartial judge, where political purposes were not to be answered. His department on the bench was, in the highest degree, discreditable at all times, and he indulged in scurrility and abuse of the most degrading description. On the arrival of the prince of Orange, the chancellor, who had disguised himself as a seaman, in order to get on board a ship unknown, was de-

ted in a low public house, in Wapping, by an attorney whom he had insulted in open court. The latter making his discovery known, Jeffreys was immediately seized by the populace, and carried before the lord mayor, who sent him to the lords in council, by whom he was committed to the Tower, where he died April 18, 1689.

JEFFRIES, John, M. D., was born at Boston, Feb. 5, 1744, and, after graduating at the university of Cambridge, commenced the study of medicine. After completing his preparatory studies, and being admitted to practise, he went to London, and sedulously attended the instructions of the most distinguished lecturers. June 1, 1769, the university of Aberdeen conferred on him the degree of doctor of physic, he being, as it is believed, the first native of the American provinces who obtained that honor. In the same year, he returned to Boston, where he recommenced his labors, and continued to practise, with great success, until the evacuation of that city by the British garrison. He then accompanied general Howe to Halifax. That commander made him surgeon-general to the forces in Nova Scotia, in 1776. In March, 1779, he went again to England, where he was made surgeon-major to the forces in America. In the spring of 1779, he entered upon the duties of this office in Savannah, then in the possession of the British. He did not, however, retain it very long, for, in December, 1780, he was again in London, having resigned, and proceeded thither in consequence of a severe domestic affliction. In London, he practised with considerable success, and occupied himself much with scientific research, having declined the offer of the lucrative post of surgeon-general to the forces in India. To ascertain the correctness of certain preconceived hypotheses relative to atmospheric temperature, and the practicability of some ærostatic improvements which had suggested themselves to his mind, he undertook two aerial voyages. The second one was made Jan. 7, 1785, from the cliffs of Dover, across the British channel, into the forest of Guinnes, in the province of Artois, in France, and was the only successful attempt to cross the sea in a balloon. The reputation accruing from these expeditions gained him the notice and civilities of some of the most distinguished personages of the day, procured for him an introduction to all the learned and scientific societies of Paris, and facilitated his access to the medical and anatomical schools of that metropolis. He drew up a

paper, detailing the result of his various experiments, which was read before the royal society of London with much approbation. In the summer of 1789, he repaired to Boston, where he soon acquired eminence. It is said that he delivered the first public lecture in Boston on anatomy, a branch of which he was very fond. He delivered, however, but one; for, on the second evening, a mob, having collected, entered his anatomical room, and carried off, in triumph, his subject, which was the body of a convict, given him by the governor after execution. After an uninterrupted and successful practice of 53 years, he was seized with an inflammation of the bowels, originating in a hernia occasioned by great exertion in his first aerial voyage, which carried him off on the 16th of September, 1819, aged 76 years.

JEHOVAH; the awful and ineffable name of the God of Israel, which was revealed to Moses. The pronunciation of this celebrated τετραγράμματον, which means *He who is, was, and will be*, or the *Eternal, Unchangeable, the Faithful* (Exod. iii. 14; vi. 3), is not known, nor is its entire signification, though it seems to contain all the tenses of the Hebrew word to be, and to imply, as above explained, *eternal and necessary being*. It reminds us of the inscription on the temple of Isis, in Egypt—"I am whatever is, was, and will be, and no mortal has ever raised my veil;" and this resemblance may perhaps be explained by the passage in Acts vii. 22, "Moses was learned in all the wisdom of the Egyptians." (See *Egyptian Mythology*, end of article *Hieroglyphics*.) How far it may be connected with the exclamation *Ido*, of the Egyptians and Greeks (Diod. Sic. i. 94; Macrobius, *Saturn.* i. 18), we cannot decide. We know that the Hebrews cherished the most profound awe for this incommunicable and mysterious name, and that this sentiment led them to avoid pronouncing it, and to substitute for it, in the sacred text, the word *Adonai*, which signifies *the lord*. This custom still prevails among the Jews, who attribute to the pronunciation of the name of the Almighty the power of working miracles, and thus explain those of Christ. This religious respect for the name of God is analogous to the veneration of the Egyptians for the proper names of their deities. They may be written either in the figurative, symbolic or phonetic characters (see *Hieroglyphics*); and, in hieroglyphic or hieratic inscriptions, which are of a sacred character, they are phonetic; but in demotic texts,

which are of a profane nature, the names of the gods are always expressed symbolically, and never phonetically; and Champollion has even found that some hieroglyphic names of divinities were written one way and pronounced another. The Greeks, too, were superstitiously fearful of uttering the name of *Gorgon* or *Demogorgon*, and not less afraid of calling the Furies by their names. (Euripides, *Orestes*, verses 37 and 430.) The conception of the Jehovah of the Israelites differs from all other theological conceptions of that age. No image of him was allowed. He was the invisible protector and king of Israel, worshipped by obedience to his commandments, and an observance of the ceremonies instituted through Moses; yet the Jews were not sufficiently advanced to adore their Jehovah entirely in a spiritual manner, and the popular belief attributed to him more or less of human qualities. Thus he was conceived, from the time of David, to have his residence particularly on mount Zion. Jehovah was, and still is considered, by the Jews, as the particular God of their race, the national God of Israel; and it was Christ who first represented him as the protector of all mankind, as a father, and not an object of fear, to whom the Israelites even attributed bad passions.

JELLY includes every translucent juice so far thickened as to coagulate, when cold, into a trembling mass; as the juices of acid or mucilaginous fruit, currants, &c., which, by the addition of one part sugar to two parts of juice, and, by boiling, have obtained a proper consistence; also a concentrated decoction of Iceland moss, made agreeable to the taste by the addition of sugar or liquorice; also strong decoctions of the horns, bones or extremities of animals, boiled to such a degree as to be stiff and firm when cold, without the addition of any sugar. The jellies of fruits are cooling, saponaceous, and acescent, and therefore are good as medicines in all disorders of the *primæ viæ*, arising from alkaliescent juices, especially when not given alone, but diluted with water. On the contrary, the jellies made from animal substances are all alkaliescent, and are therefore good in all cases in which an acidity of the humors prevails. The alkaliescent quality of these is, however, in a great measure, taken off, by adding lemon juice and sugar lemon to them. There was formerly a sort of jellies much in use, called *compound jellies*; these had the restorative medicinal drugs added to them, but they are now scarcely ever

heard of. Animal jelly is soluble in water, glutinous, becomes fluid by heat, coagulates in the cold, combines with oils and resins, is decomposed by corrosive alkali, and gives out ammonium; when it is treated with nitric acid, it yields oxalic acid, and, under dry distillation, yields the products obtainable from all animal substances, and can be changed into a perfectly dry substance by evaporation.

JEMAPPES; a village of the Netherlands, in Hainault, near Mons, on the Scheldt, celebrated as the place of the first great battle in the French revolutionary war, fought November 6, 1792, in commemoration of which, while under the French dominion, the whole department was called *Jemappes*. The loss of this battle by the Austrians had a great influence on the public sentiment of Europe, and gave the highest impulse to the enthusiasm of the French. The consequence of this defeat—the loss of the Netherlands and of Liege by the allies—would have been still greater, if the French had not stopped their pursuit of the flying Austrian army at the Roer, instead of driving them across the Rhine. The Prussians had already retired to the Rhine after their unsuccessful campaign in 1792, when Dumouriez suddenly fell upon the Netherlands, planning the movements of his army with so much skill, and executing them with so much rapidity and decision, that the allies soon perceived that there was no want of able generals among the French. The French army was more numerous than the Austrian, which was commanded by Albert, duke of Saxe-Teschén, but the latter had the advantage of a position considered almost impregnable. The enthusiasm and martial spirit of the French, which here displayed themselves in all their brilliancy, bore down all obstacles, and redoubt after redoubt was stormed and taken, to the chant of the Marseilles hymn. Dumouriez, who had appointed the young duke of Chartres, now king of the French, his lieutenant, commanded the centre, Dampierre and Beurnouville the right, and Ferand the left wing. The loss of the Austrians was estimated at 5000 men. Eight days after, Dumouriez entered Brussels.

JEMSHID, or **GIAMSHID**; a Persian sovereign, celebrated in Oriental history, the period of whose existence is somewhat uncertain. He is said to have ascended the throne of Persia about 800 B. C., and to have founded the famous city of Istakhar, called, by the Greeks, Persepolis. To this prince is ascribed the first establishment of public baths, the

invention of tents and pavilions, and the use of lime for mortar in buildings. He instructed his subjects in astronomy, and also probably in the mysteries of Sabeism, or the worship of the heavenly bodies; but, though he is represented as a wise and powerful monarch, he was unfortunate in war, and, having been dethroned by Zohak, an Arabian king, he spent the latter part of his life in indigence and obscurity. His son Pheridoun was preserved, by the care of the queen, from the pursuit of the usurper, and ultimately recovered his father's throne. (See Malcolm's *History of Persia*, two volumes, London, 1829.)

JENA; a town of Saxe-Weimar, in Thuringia, at the confluence of the Leuthra and the Saale, in a romantic valley, with 60,000 inhabitants; lat. 50° 56' 28" N.; lon. 11° 37' 23" E. The environs are diversified and delightful, and contain several fine ruins. There are some manufactures at Jena, and it has a much frequented fair, but the chief support of the place is the ancient university. In 1547, the elector John Frederic, after the unfortunate battle of Mühlberg, being conducted a prisoner through Jena, and being occupied with the design of supplying his dominions with a substitute for the lost university of Wittenberg, founded by his uncle, Frederic the Wise, was pleased with the charming valley of Jena, and advised his sons to found a university here. Three convents, with their possessions, were appropriated to this institution, which Charles V actually chartered as a university (February 2, 1558), though not very willingly, because it was a Protestant institution. Jena has had many of the first German literati among her professors, and the late duke of Saxe-Weimar was so liberal towards it, that it became one of the most favorite universities of the Germans; but the celebration of the jubilee of the reformation, on the Wartburg, not far from Jena, where Luther translated part of the Bible, and the circumstance that Sand, the murderer of Kotzebue, studied there, induced the other German governments to prohibit, in 1819, any of their subjects from studying there. Prussia revoked her prohibition in 1825; but it has not resumed its former standing. In 1829, it contained 600 students. The university has a library of 100,000 volumes, museums, a botanical garden, an anatomical theatre, &c. It is one of the cheapest in Germany. It is also one of the few where the small sword is used in duels. Schiller, the German poet, was

professor of history at Jena, which is the joint university of the Saxon duchies.

Jena and Auerstädt, Battle of (October 14, 1806). Placed in the most unhappy situation, since the treaty of Vienna of December 15, 1805 (see *Austerlitz*), involved in war with England and Sweden on account of Hanover, Prussia took up arms to defend the independence of Northern Germany against France; but the commander-in-chief, the duke of Brunswick, 72 years old, instead of penetrating immediately beyond the Rhine, and compelling the elector of Hesse, who wished to remain neutral, to unite his forces with those of Prussia, concentrated the Saxon-Prussian army in Thuringia, by which he lost not only the right moment of attack, but also all the advantages of his line of defence and communication with the Elbe, while he obstinately persisted in the opinion that Napoleon would not act on the aggressive. He discovered too late, that the left flank of the Prussian army was wholly exposed to the enemy. Napoleon, who left Paris September 25, and arrived at Kronach October 8, had achieved the victory, and the great results of the campaign before the battle was fought, by his generalship in making himself master, within five days, of the region between the Saal, Elster and Elbe. By his preparatory movements, the left wing of the Prussian army was surrounded, and Saxony, as well as the military roads to Dresden and Berlin, now lay open to him; whereupon he pressed forward, without opposition, in the rear of the Prussian army, as far as Mauburg, which Davoust occupied October 13, while the Prussian army stretched itself from Jena to Eisenbach, and the duke took up his head-quarters at Weimar, from October 10 to 12. Two important points, on the left bank of the Saal, were also occupied by the French; Jena by Lannes, and Kahla by Augereau. Napoleon himself arrived at Jena from Gera, October 13. He had previously made a proffer of peace to the king of Prussia; but the bearer of his missive of October 12, from his camp at Gera, did not reach the king till the day of battle. The double battle at Auerstädt and Jena, October 14, therefore completed the defeat of the Prussian army, already vanquished by combinations. Napoleon was master of the points of passage on the left bank of the Saal. The Prussian army under prince Hohenlohe was separated from that of the duke of Brunswick; and the prince, while he guarded the *chaussée*, which led

to the plain, where he expected to be attacked, permitted the enemy to occupy the steep eminences, which commanded the valley of the Muhl, at Jena; and the duke himself was equally negligent in regard to the heights and pass of Kösen. These oversights were disastrous, for Napoleon caused the most troublesome obstructions in the narrow ravines to be levelled, on the night of October 13, in order to convey his artillery to the plateau of the selected place. In the morning, a thick cloud concealed his operations. By degrees, he brought 80,000 men on the field. The left wing was led by Augereau, the guards by Lefebvre, the centre by Lannes, and the right wing by Soult. Ney subsequently advanced from the rear to the first line. Three bloody battles decided Hohenlohe's defeat. At first, the Prussian vanguard, under Tauenzien, was overthrown at Klosewitz, then the main body, under prince Hohenlohe, at Vierzehnheiligen, and lastly the former right wing of the army under general Rüchel, at Capellendorf. Thus an army of 50,000 men was completely broken up. On the same day, the duke put in motion, on the high road leading from Auerstädt to Kösen, his army of 50,000 men, in three divisions; the first, under Schmettau, accompanied by the king, three princes of the blood, and the field-marshal Möllendorf; but Davoust, whose army contained about 36,000 men, had already a few hours before occupied the important pass of Kösen. The repeated attacks of the division of Schmettau, which met the enemy at Hassenhausen, and of general Blücher's cavalry, were repelled, the second division of the Prussian army not coming to their assistance, being retarded by the bad roads. The duke himself being wounded in the eye by a musket shot, and general Schmettau being mortally wounded, all unity of operations was lost. The king now committed the chief command to the field-marshal Möllendorf, who gave the orders for the retreat; but the first division, on their retreat, becoming entangled with the second, which was advancing, Davoust so improved the consequent confusion as to achieve a complete victory, which won him the title of *duke of Auerstädt*. General Kalckreuth protected, nevertheless, for some time, the retreat of the army along the road from Auerstädt to Weimar and Buttstadt. It was intended to renew the battle on the 15th, but on this day the king received information in Sömmerda of Hohenlohe's defeat. As the communication of the army with

Halle, where the reserves were stationed, was entirely cut off, and it was pursued every where by Napoleon's battalions, and reduced to confusion, it was obliged to separate into small corps, some of which, under Hohenlohe's command, reached Magdeburg, and the Elbe, October 26, by a circuitous route over the Hartz mountains. The loss sustained by the Prussians, up to October 14, was above 50,000 men, killed, wounded or prisoners. The Saxons lost, in the whole, 23 officers killed, 115 wounded, and more than 6000 men prisoners. The loss of the French, in killed and wounded, did not amount, according to their own accounts, to more than 4100. The loss of the Prussians, after the battle, was still greater; for, October 16, 14,000 Prussians, under Möllendorf, shut up in Erfurt, surrendered to Murat. The captive Saxons, however, were released on promise never to serve again against France; whereupon Napoleon caused the neutrality of the electorate to be proclaimed by the grand-duke of Berg on the 17th, though peace was not concluded with Saxony till December 11, at Posen. By this measure, Napoleon secured his right flank, in case he should advance to Berlin, and opened to his own use all the resources of the electorate, which he occupied. The most important events now followed each other in rapid succession. October 18, Bernadotte attacked the Prussian reserves of 10,000 men, under Eugene, duke of Würtemberg, at Halle, and made 5000 prisoners. Davoust marched by way of Leipsic and Wittenberg, Lannes by way of Dessau, to Berlin (October 25), which Napoleon entered on the 27th. Spandau surrendered to Lannes, October 25. Meanwhile general Kalckreuth succeeded in conducting a part of the residue of the army, 12,000 in number, beyond the Oder. Blücher, on the contrary, did not join Hohenlohe with the wreck of the reserves, but, after the prince had capitulated at Prenzlau with 17,000 men, October 28, proceeded to Strelitz, where he formed a junction with the corps of the duke of Weimar, under the command of the duke of Brunswick-Cels. His forces now amounted to 21,000 men; but, pursued by Murat, Bernadotte and Soult, he was obliged to press forward towards Lübeck on the 5th, and capitulate at Ratkau on the 7th. (See *Lübeck*.) Meanwhile a corps of cavalry of 6000 men, under general Schimmelpfennig, had surrendered, on the 29th, to general Milhaud, at Pasewalk; and on the 31st, another corps of 4000, under

general Bila, at Anclam, surrendered to general Becker. Stunned by this annihilation of the Prussian army in the space of 14 days, the commanders of fortresses surrendered their places to the enemy, without the honor of resistance. The last bulwark of the monarchy, Magdeburg, which was abundantly supplied with every necessary, General Kleist shamefully opened to the French under Ney, on the 8th of November. Napoleon, elated by his success, suddenly broke off the pacific negotiations, which were near a conclusion, carried his arms across the Oder, invited the Poles to his standard, and came up with the Russians on the Vistula. To all the military reasons for the victory of Napoleon, the great moral difference of the two armies must be added—the French, enthusiastic for glory and for their commander, led by excellent officers, mostly young; the Prussian army, consisting, in a great measure, of foreigners and rabble, ready to run away at the first good opportunity, their generals old, their king weak. Immense resources were opened to Napoleon by the possession of all North Germany, with the exception of Colberg; for he had taken possession of the electorate of Hesse, November 1; of Brunswick and Fulda, October 26; of Hanover, November 9; of the Hanseatic cities, November 19; of Mecklenburg, November 28; and of Oldenburg, December 6. November 21, the celebrated decree of Berlin was issued, interdicting all commerce between Great Britain and the continent, and declaring the British islands in a state of blockade.

JENKINSON, Charles. (See *Liverpool, Earl of*.)

JENKINSON, Robert Banks. (See *Liverpool, Earl of*.)

JENNE, one of the most celebrated and important cities in Central Africa, was first visited by Caillé, the French traveller, in 1828. It is described by him as situated at the eastern extremity of a branch of the Niger, separating, below Sego, from the main current, with which, after passing the former city, it again unites. The country around, as far as the eye can reach, forms only a marshy plain, interspersed with a few clumps of trees and bushes. The city is two miles and a half in circuit, surrounded by a wall of earth; the houses tolerably well built of bricks dried in the sun; the streets so wide that seven or eight persons may walk abreast. Population is estimated by Caillé at 8,000 or 10,000. The inhabitants consist of various African tribes, attracted

by the extensive commerce of which Jenne is the centre. The four principal tribes are the Foulahs, Mandingoes, Bambaras and Moors, of whom the first are the most numerous, and are strict adherents to Mohammedanism, compelling the pagan Bambaras to conform to the rules of the Koran, whilst they are at Jenne. The trade is chiefly in the hands of 30 or 40 Moorish merchants, who maintain a communication with Timbuctoo, in barks of considerable size, ranged along the river. The markets are filled with the productions of the surrounding country, either for consumption or exportation; in exchange for which, articles are brought from Timbuctoo, including a variety of European goods. Caillé found the merchants of Jenne more polished than any natives of Africa with whom he had had dealings. The mode of living is extremely simple. (See Caillé's *Journey to Timbuctoo*.)

JENNER, Edward; an English physician, celebrated for having introduced the practice of vaccination, as a preventive of the small-pox. He was the youngest son of a clergyman in Gloucestershire, and was born May 17, 1749. Being destined for the medical profession, he was, after a common school education, placed as an apprentice with a surgeon, at Sodbury, in his native county. He subsequently visited London, to finish his studies, by attending the lectures of the celebrated anatomist John Hunter. Returning to the country, he settled at Berkeley, to practise the various branches of his profession. He had already obtained the reputation of an ingenious practitioner, and a man of talent and science, when he made known to the world the important discovery which has raised him to an enviable situation among the benefactors of the human race. His investigations concerning the cow-pox were commenced about the year 1776, when his attention was excited by the circumstance of finding that some individuals, to whom he attempted to communicate the small-pox by inoculation, were not susceptible of the disease; and, on inquiry, he found that all such patients, though they had never had the small-pox, had undergone the casual cow-pox, a disease common among the farmers and dairy-servants in Gloucestershire, who had some idea of its preventive effect. Other medical men were aware of the prevalence of this opinion; but they treated it as a popular prejudice; and Jenner seems to have been the first who ascertained its correctness, and endeavored to derive from it some practical

advantage. He discovered that the *variola vaccina*, as the complaint has been since termed, having, in the first instance, been produced by accidental or designed inoculation of the matter afforded by a peculiar disease affecting the udder of a cow, could be propagated from one human subject to another by inoculation, rendering all who passed through it secure from the small-pox. He made known his discovery to some medical friends, and in the month of July, 1796, Mr. Cline, surgeon to St. Thomas's hospital, introduced vaccination into the metropolis. The practice of vaccine inoculation was adopted in the army and navy, and honors and rewards were conferred on the author of the discovery. The diploma constituting him doctor of medicine, was presented to Jenner as a tribute to his talents, by the university of Oxford. He was chosen a fellow of the Royal Society, and of other learned associations; and a parliamentary grant was made to him of the sum of £20,000. The extension of the benefits of vaccination to foreign countries, spread the fame of the discoverer, who received several congratulatory addresses from continental potentates. He died suddenly, in consequence of apoplexy, January 26, 1823, and was interred in the parish church of Berkeley. Doctor Jenner was the author of an Inquiry into the Causes and Effects of the Cow-pox, (1798, 4to.); and Farther Observations on the *Variola Vaccina*, or Cow-pox, besides various letters and papers on the same subject, published in periodical works. (See *Vaccination*.)

JENNY, COTTON. (See *Spinning*.)

JENYNS, Soame, a witty and elegant writer, was the only son of sir Roger Jenyns, knight. He was born in London, in 1704, and received a domestic education until the age of seventeen, when he was entered a fellow commoner of St. John's college, Cambridge. He remained three years at the university, and then married early a lady with a large fortune, to whom his father was guardian; but the marriage proved unhappy, and, in consequence of an elopement, a separation took place. In his youth, Mr. Jenyns, with a small and delicate person, sustained the character of a beau, and his first performance was a poem on the Art of Dancing, published in 1728. In 1741, he was left, by the death of his father, master of a large fortune, on which he entered into public life as representative of the county of Cambridge. He began his career by supporting sir Robert Walpole, and ever after remained a faithful adherent to the minister for

the time being. In 1757, he published his Free Inquiry into the Nature and Origin of Evil, the fundamental principle of which is, that the production of good without evil is impossible; that evils spring from necessity, and could not be done away without the sacrifice of some superior good, or the admission of greater disorder. In respect to moral evil, his theory is, that it is permitted, in order to provide objects for the just infliction of physical evils. In 1776, appeared his View of the Internal Evidences of the Christian Religion. The foundation of his reasoning is, that the Christian religion is a system of ethics so superior to, and unlike any thing which had previously entered into the mind of man, that it must necessarily be divine. In 1782, appeared his Disquisitions on Various Subjects (8vo.), which are marked with his usual characteristics of sprightly wit and shrewd observation, but are vague and declamatory. He died in 1787. His works have been collected into four volumes (12mo.), with a life prefixed by C. N. Cole.

JEPTHAH; a natural son of Gilead, who, being driven from home by his brothers, lived in the land of Tob, but, when the Ammonites waged war against Israel, was sent for to defend his countrymen. Jephthah tried conciliatory measures, but, being unsuccessful in this, he put himself at the head of the Israelites, and defeated the enemy. Having rashly made a vow that, if he was victorious, he would sacrifice to God, as a burnt offering, whatever should first come to meet him from his house, he was met, on his return, by his daughter, his only child, whom he sacrificed, in consequence, to the Lord. (*Judges xi. 29, 40.*) The mode in which the sacrifice was performed, has given rise to much controversy, some authors maintaining that Jephthah put her to death near the altar; others that he devoted her to perpetual virginity in the temple; others, and most commentators, think that he actually sacrificed her as a burnt offering, and, though Moses prohibits, explicitly, such a sacrifice, that it may have been permitted in the wild and barbarous time of Jephthah. Jephthah ruled six years as a judge and general. (*Judges xi and xii.*)

JERBOA (*dipus*, Gmel.). These singular little animals are found in many parts of the old continent, but seldom in great plenty. The most common species is the *D. sagitta*. It is of a pale yellowish fawn-color on the upper parts, and white beneath; the length of the body is about eight inches, and of the tail ten. The

jerboas inhabit dry, hard, and clayey ground, in which they make their burrows. These are of considerable length, and run oblique and winding; at about half a yard below the surface of the ground, they terminate in large excavations or nests; they are usually provided with but one opening, though the animals are provident enough to make another passage, to within a short distance from the surface, through which they rapidly penetrate in case of necessity. It is almost impossible to kill them, except by coming on them unawares. The Arabs, however, take them alive, by stopping up all the outlets of the different galleries belonging to the colony, with the exception of one, through which they force them out. They keep within their holes during the day, sleeping rolled up, with their head between their thighs. At sunset they come out, and remain abroad till morning. They go on their hind legs only, the fore legs being very short; their motion is, nevertheless, very rapid, being effected by leaps of six or seven feet, which they repeat so swiftly, that it is nearly impossible to overtake them. They do not proceed in a straight line, but spring first to one side, and then to the other. In leaping, they carry their tails stretched out, whilst, in standing or walking, they carry them in the form of an S, the lower curve touching the ground. In their wild state, these animals are very fond of bulbous roots; but, when confined, they will feed on raw meat. They are tamed without much difficulty, but they require to be kept warm. The jerboa is supposed to be the *cony* of the Bible. It was forbidden food to the Israelites; it is, however, eaten by the Arabs.

JEREMIAH, the second of the great prophets of the Old Testament, of a noble Jewish family of the priestly order, flourished during the darkest period of the kingdom of Judah, under the last four kings, till the Babylonish captivity, and exercised the prophetic office for 40 years, with unwearied patience and fidelity. But in vain did he exhaust admonitions, entreaties and warnings to move the people to a sense of piety and resignation; he was rewarded by abuse, imprisonment and menaces of death. After the destruction of Jerusalem, when all the people were carried into captivity, he was honored by Nebuchadnezzar as the noblest of his nation, and permitted to choose his own place of residence. The old prophet staid by the ruins of the holy city, and continued to direct the remaining Jews

by his counsels till their flight into Egypt, where he died at an advanced age. He began, under the reign of Jehoiakim, to dictate his instructions and prophecies to his amanuensis Baruch. They evince the most ardent patriotism and unshaken trust in the God of his fathers, but, at the same time, show how much the spirit of the prophet was crushed by his own misfortunes and the disasters of his country. It is only in his predictions against foreign states, that his expression rises to some degree of strength; but elsewhere his tone is as mild as his character, and mournful as the times in which he lived. He clearly foresaw the downfall of Judah, and lamented it on the ruins of Jerusalem. His Lamentations, the fruit of this grief for the fate of his country, are elegies full of touching melancholy and pious resignation, which, by their beautiful, harmonious structure, remind us of a better era of Hebrew poetry.

JERICO; a considerable town of ancient Judea, on a plain north-east of Jerusalem, on the west of Jordan, noted, especially in Solomon's time, for its balsam-gardens, and its thickets of palm-trees and roses, and carrying on a flourishing trade in balsam and spices. It was the key of Palestine, and was therefore invested by the Israelites, who had passed the Jordan under Joshua to conquer this country. On the seventh day, it was taken in a miraculous manner, and destroyed, but was rebuilt some time after. Its site is now occupied by the village of Raha. The gardens and thickets have disappeared; the balsam-tree alone is cultivated. There is a creeping plant, with a singularly shaped and fragrant flower, which we call the *rose of Jericho* (*anastatica*). It was probably brought over to Europe in the times of the crusades.

JERMACK. (See *Siberia*.)

JERMOLOFF (not *Yermaloff*), Alexei Petrowitch; Russian general of infantry, governor of the provinces of Georgia and Caucasus, and general in chief of the army of the Caucasus. In April, 1815, Jermoloff commanded the second corps of the Russian army, which, under Barclay de Tolly, marched from Poland into France. In 1817, he was sent, with 50,000 select troops, to occupy the frontiers on the side of Persia. Having personally inspected all the military posts, he was sent as ambassador to the Persian court at Teheran, where the Russian cabinet wished to counteract the influence of the English. For this reason, the suite of Jermoloff was very splendid. He had with him the flower of

the Russian nobility, and, besides, some French officers, whom Napoleon had sent with Gardanne on a similar mission to Persia in 1807. Jermoloff also received the reports made by Gardanne, and the maps drawn by the French officers. A very advantageous treaty of commerce and amity was soon concluded between Russia and Persia, by which the peace of Tiflis, Sept. 13, 1814, was confirmed. Russia was intrusted by the same compact, in some degree, with the guarantee of the Persian succession, and Persia was placed almost in the same relation to Russia as Poland had been in the time of Catharine II. Jermoloff then returned to his former station, and exerted himself much for the improvement of commerce in those parts. In 1819, he sent captain Murawjeff to the coast of the Caspian sea, to invite the Turkmans living there to form amicable connexions with Russia. Under him, the army of the Caucasus was increased to 100,000 men. In 1827, he subdued the Tshetchenizes mountaineers, addicted to robbery. In 1826, he repulsed the Persians, who, under Abbas Mirza, had broken the peace of Ghulistan. In April, 1827, general Paskewitch succeeded him in the chief command against the Persians.

JEROME, ST., one of the most learned and prolific authors of the early Latin church, was born about 331, in Dalmatia, of wealthy parents, educated with care in literary studies, and made familiar with the Roman and Greek classics under the grammarian Donatus at Rome. But he did not escape uncontaminated by the licentiousness of the capital; and he himself confesses the excesses of his youth. He soon, however, became inclined to the Christian faith. The catacombs and tombs of the martyrs first excited his devotion. His travels on the Rhine and in Gaul, made him acquainted with several Christian preachers, and before his 40th year he was baptized in Rome. After a long residence at Aquileia, he went, in 373, to Antioch, in Syria, where his inclination to an ascetic life became more decided. In 374, he retired to the deserts of Chalcis, and there passed four years as a hermit, in the severest mortifications and laborious studies. He left his solitude again to be ordained presbyter at Antioch. He did not, however, confine himself to the discharge of the duties of this office, but soon after went to Constantinople, to enjoy the instruction of Gregory of Nazienzen. In Rome, whither he accompanied his friend the bishop Damasus, he made his appearance

as a teacher. His exposition of the Holy Scriptures found favor with the Roman ladies; and, although no one reprehended more than he the manners of the fashionable world, several matrons of distinction, with their daughters, complied with his exhortations, and became nuns. St. Marcella and St. Paula are celebrated for the learned and ingenious theological epistles he wrote them, and for their rare monastic piety. Paula accompanied him to Palestine, in 386, where he founded a convent at Bethlehem, with her funds, and in her society: in this he remained till his death, in 420. His writings show his active participation in the controversies concerning the doctrines of Origen, Meletus and Pelagius; he always defended, with zeal and ability, the orthodox doctrines of the church, though his own writings are not free from vestiges of the views and opinions of these different parties. His profound knowledge of the Bible, which he read in the original languages, frequently led him to results on which he subsequently had controversies with the church; and his method of interpreting the Scriptures borders closely on the allegorical interpretations of Origen, whom he respected, studied and attacked. His biblical labors are highly valuable; his Latin version of the Old Testament, from the original language, is the foundation of the Vulgate, and his commentary gave a new impulse to the study of the Holy Scriptures. In the controversy with Jovinian and Vigilantius, the opponents of the ascetic bigotry, his immoderate zeal for the monastic life, which contributed much towards the promotion of this new institution, led him to expressions which manifest more strength and fire of feeling than maturity of judgment. On the whole, with a glowing imagination, which made his style lively and attractive, and with an extensive knowledge of languages, he possessed a less philosophical genius than his more celebrated contemporary Augustine.

JEROME OF PRAGUE; of the family of Faulfisch, educated at the universities of Prague, Paris, Cologne and Heidelberg; in faith and sufferings, the companion of the famous John Huss, whom he excelled in learning and eloquence, and to whom, in the bold attempt at reformation of the 15th century, he was inferior only in moderation and prudence. His reputation for learning was so great, that he was employed by Ladislaus II of Poland to organize the university of Cracow; and Sigismund of Hungary caused Jerome to

preach before him in Buda. The doctrines of Wickliff, which he introduced into his preaching, subjected him to a short imprisonment by the university of Vienna; but he was released by the people of Prague. He now took a zealous part, at Prague, in the contest of his friend Huss against the abuses of the hierarchy and the dissoluteness of the clergy, and not unfrequently proceeded to violence. He attacked the worship of relics with ardor, trampled them under foot, and caused the monks, who opposed him, to be arrested, and even had one thrown into the Moldau. He publicly burned, in 1411, the bull of the crusade against Ladislaus of Naples, and the papal indulgences. When Huss was imprisoned in Constance, he could not remain inactive, and hastened to his defence. But a public letter, in which he requested a safe conduct from the council of Uberlingen, was not satisfactorily answered, and, on his attempting to return to Prague, the duke of Sulzbach caused him to be arrested in Hirschau and carried in chains to Constance. He here received, in prison, information of the terrible fate of his friend, and, after several hearings, in which no one was able to oppose him, an imprisonment of half a year had so worn him down, that he finally yielded to violence, and, on the 11th Sept., 1415, consented to recant the heresies with which he and Huss were charged. But this apostasy did not deliver him, and, after languishing a year, without being able to see or read, in the darkness of the dungeon, he displayed his former courage, on an audience on the 26th May, 1416. He solemnly retracted his recantation, avowed that none of his sins tormented him more than his apostasy, and vindicated the principles of Huss and Wickliff, with a boldness, energy and eloquence, that extorted the admiration of his adversaries, but, nevertheless, precipitated his destruction. May 30, he was burned at the command of the council. He proceeded to the pile, consoled by singing the apostles' creed and spiritual hymns, and gave up his spirit in prayer. His ashes were thrown into the Rhine, in order to annihilate his memory; but posterity has done him justice, and reveres him as the martyr of truth, who, unwearied in life, and noble in death, has acquired an immortal renown for his share in the reformation. His views and doctrines coincided closely with those of Huss. (See *Huss*.)

JEROME BONAPARTE (since 1816, prince of Montfort), youngest brother of Napo-

leon, formerly king of Westphalia, was born at Ajaccio, Dec. 15, 1784. Having gone to France with the rest of the family in 1793, he was placed at the college of Juilly. Immediately after the revolution of the 18th Brumaire (Nov. 9, 1799), he entered the naval service, and, in 1801, was lieutenant in the expedition against St. Domingo, commanded by his brother-in-law, general Leclerc. He soon returned to France to carry despatches to the government, and not long after sailed again for Martinique, in the frigate *L'Epervier*, of which Napoleon had given him the command. In the next year, the war between England and France being renewed, Jerome cruised several months between St. Pierre and Tobago; but he finally was obliged to leave the station, and went to New York. While in the U. States, he married, Dec. 27, 1803, miss Elizabeth Patterson, eldest daughter of a rich merchant of Baltimore. When Napoleon assumed the imperial diadem, this connexion was made to yield to views of state policy, and Jerome's marriage was declared invalid, after the birth of a son, still living in the U. States. Jerome returned to France in May, 1805, having escaped the English, who were watching for him off New York. Napoleon sent him to Algiers to obtain the delivery of the Genoese there held in slavery. This mission was successfully accomplished, and 250 persons were restored to liberty. The emperor now created his brother captain, and gave him the command of a 74, and soon after of a squadron of eight ships of the line, which sailed for Martinique, in 1806. In the same year, on his return to France, he was created rear-admiral. In 1807, he was transferred from the sea service, and received the command of a corps of Bavarians and Würtembergians, which attacked the Prussians and occupied Silesia. In this campaign, he became general of division. After the peace of Tilsit, in 1807, Jerome married (August 12) Frederica Catharine, princess of Würtemberg; and on the 18th of the same month, the kingdom of Westphalia having been formed by Napoleon, the crown was bestowed on him. All the continental powers acknowledged him. Cassel was his capital, and that city was much embellished by him. In the article *Westphalia* will be found a historical sketch of this kingdom; we will only say at present, that the intentions of the king were good, his dependence on Napoleon such as to render him rather a French viceroy than a sovereign, and his prodigality enormous, which will be less

severely criticised if we remember that he was but 24 years old when he ascended the throne. Jerome had not passed through the different stages of the revolution, nor become sobered by experience, but was dazzled by the rapidity of his elevation. His civil list was fixed, and he received a million of francs as a French prince; and though Westphalia suffered severely, as did all other parts of Germany, in consequence of protracted wars, many improvements were introduced into the government, particularly the equal distribution of the taxes, and a uniform administration of justice. An anecdote is told of Jerome, which, if true, illustrates his views. Soon after his arrival in Cassel, deputations of the different classes were presented to him: that of the peasants was presented as the third estate, upon which he quickly replied, "There are no estates in the kingdom; I know only citizens." His prodigality was not unnoticed by Napoleon, and in other respects the emperor was dissatisfied with him, as he showed when Jerome appeared to offer his congratulations on the birth of the king of Rome (March 10, 1811). In the campaign against Russia, in 1812, Jerome commanded a division of Germans, at the head of which he distinguished himself in the battles of Ostrowa and of Mohilow; but, by his neglect, Bagration having effected a junction with Barclay de Tolly (August 6, 1812), he was severely reprimanded by Napoleon (who was thus prevented from accomplishing an important manœuvre), and was sent back to Cassel. In the ensuing year, the French were obliged to evacuate Germany, and Jerome retired to France with the queen, whose affections kept pace with the misfortunes of her husband. Jerome, on leaving his kingdom, declared to a deputation of citizens at Marburg, that he did not regret the kingdom of Westphalia; that to be a French prince was his whole pride. Towards the end of 1814, Jerome and his wife were obliged to leave France. The ex-queen, when setting out for the kingdom of her father, was arrested near Paris, on the route to Fontainebleau, by a band of armed men under the command of the marquis Maubreuil, who had been her own equerry at Cassel. This man, who had been formerly a Chouan, robbed her of her jewels, which, however, she recovered by a legal process. Jerome, who had gone to Blois to join the empress Marie Louise, went, after Napoleon's abdication, with his wife to Switzerland, lived in Gratz and Trieste, and, on Napoleon's

return from Elba in 1815, embarked secretly, from fear of the Austrians, in a vessel which his brother-in-law Murat had sent him. He arrived in April in Paris, with cardinal Fesch, his uncle, and was present at the celebration of the *Champ-de-Mai*, June 1. The following day, he was made a peer, and then departed with Napoleon for the army. He fought at Ligny and Waterloo, and displayed much courage, exclaiming, "We ought to die here," or "We can die no where better than here." He was wounded in this battle; and we may add here, that Napoleon once said of him he would become a great general. He returned to Paris with his brother. After Napoleon's second abdication, he travelled about for some time in Switzerland, lived in Würtemberg, and finally took up his residence (August, 1816) in Austria, where his wife followed him. He now owns the lordships of Wald near St. Pölten, Krainburg in Upper Austria, and Schönau near Vienna. Since December, 1819, he has generally lived with his wife in Trieste. At present they live in Schönau, in great retirement. He is much beloved by his tenants, whom he treats with kindness. His finances having become embarrassed, his wife applied to her relation, the emperor of Russia, who, in February, 1822, granted her the sum of 150,000 florins, and a pension of 25,000 paper rubles. She soon after gained a suit in the French courts, by which she recovered a sum of 460,000 francs. The prince has a son, Jerome, born at Trieste, August 24, 1814, and a daughter, born at Trieste in June, 1820: **JERSEY, NEW.** (See *New Jersey*.)

JERSEY, ISLE OF; a thriving and very populous island in the English channel, the largest and most southerly of that group on the coast of France, which forms an appendage to the English crown. Its figure is nearly an oblong square, stretching, in an easterly direction, 12 miles, with a breadth no where greater than 7, and at a medium 5 miles. It contains about 40,000 acres, 12 parishes, 2 towns—St. Helier, the capital, and St. Aubin—and several villages and fortresses. Its coast is surrounded by a natural barrier of rocks, which nearly encircle the whole island. The climate is exceedingly mild, the soil fertile, and the situation well adapted to commerce. The inhabitants speak the French language, though it is now on the decline. They make their own laws; are exempt from naval and military service, and from the dominion of the English church; have the benefit of a free port,

and trade with the enemies of England, even in time of war; above all, they are free from the taxes with which the mother country is loaded. They are almost wholly occupied in agriculture and commerce. The land is sufficiently adapted for all the common crops, and also for the pasture of cattle, which is practised to some extent; but the singular mildness of the climate has decided the inhabitants to apply chiefly to the produce of the orchard, and to trust, in a great measure, to their trade for a supply of grain, at least for one third of their consumption. The fruits, therefore, are of the highest flavor; and great quantities of cider, the common beverage, are made annually. Various fortresses have been erected, viz. Elizabeth castle, mount Orgueil, fort Henry, La Rocco, and several others. The coast is also defended by a chain of martello towers, and by numerous redoubts and batteries. The government consists of a court of judicature, and an ecclesiastical body acting separately, and, at the same time, uniting with 12 constables and a military governor, to form the assembly of the states, the legislative body of the island, without whose approbation no law made in England is binding. The governor is appointed by the crown, convokes the assembly, and has a negative voice, which, however, is merely nominal, except where the interest of the crown is concerned. The court of judicature consists of a bailiff and a president, chosen by the crown, 12 jurats, chosen by the householders, and various officers; the clerical court, of a dean and 11 rectors. Remains of antiquities, principally druidical, are found in different parts of the island. The architecture of all the churches is the pointed or Gothic. Various attempts have been made by the French to possess themselves of the island, but without success: the most remarkable was in 1781. Population, 28,600; 75 miles from Weymouth, the nearest shore of England; and from Carteret and Boil, the nearest of the French ports, 17. Lon. of St. Aubin, 2° 11' W.; lat. 49° 13' N.

JERUSALEM (Heb. *Salem*; hence the Greek *Hierosolyma*, the sacred *Solyma*, and the Turkish *Solimani*). This celebrated city of Palestine is subject to the pacha of Damascus. Its environs are barren and mountainous. The city lies on the western declivity of a hill of basalt, surrounded with rocks and deep valleys, with a much colder climate than one would expect from its geographical situation. It is now only about two miles in

circuit. The town is built irregularly, has pretty high walls, and six gates, which still bear Hebrew names. The houses are of sand-stone, three stories high, and without windows in the lower story. This lifeless uniformity is only diversified, here and there, by the spires of the mosques, the towers of the churches, and a few cypresses. Of 25,000 inhabitants, 13,000 are Mohammedans, and 4000 Jews. Christians and Jews wear a blue turban to distinguish them. The women, in their close veils and white dress, look like walking corpses. The streets are unpaved, and filled either with clouds of dust or with mire. Nothing is to be seen but veiled figures in white, insolent Turks, and stupid or melancholy Christians. That Jerusalem is no place for the cultivation of the arts or sciences one may easily conjecture, from the despotism of the Turks, and the gloomy superstition of the Christians. Weavers and slipper-makers are the only artisans. A multitude of relics, which are, probably, not all manufactured in the city, but are sent in also from the neighborhood, are sold to the credulous pilgrims. Nevertheless, this city forms a central point of trade to the Arabians in Syria, Arabia and Egypt. The people export oil, and import rice by the way of Acre. The necessaries of life are in profusion, and quite cheap, the game excellent, and the wine very good. The pilgrims are always a chief source of support to the inhabitants; at Easter, they often amount to 5000. But few of them are Europeans. Jerusalem has a governor, a *cadi* or supreme judge, a commander of the citadel, and a *mufi* to preside over religious matters. There are still many places and buildings in the city designated by ancient sacred names. The citadel, which is pretended to have been David's castle, is a Gothic building throughout. It is also called the *Pisan tower*, probably because it was built by the Pisans during the crusades. All the pilgrims go to the Franciscan monastery of the Holy Savior, where they are maintained a month gratuitously. Besides this, there are 61 Christian convents in Jerusalem, of which the Armenian is the largest. They are supported by benevolent contributions, principally from Europe. The church of the Holy Sepulchre has been for 1500 years the most sacred place in Jerusalem. It is composed of several churches united, and is said to be erected on Golgotha. Here is shown, in a large subterranean apartment richly ornamented, the pretended grave of the Savior, with a sarcophagus

of white marble. The empress Helena is reported to have founded this church in the 4th century, after she had found the true cross. The Jews live in great wretchedness, and are confined to a small part of the city. The temple of the Mohammedans, which is regarded as one of their greatest sanctuaries, is magnificent. No Jew or Christian is permitted to enter the inner sanctuary. This temple consists of two large buildings, of which the one, El Aksa, is adorned with a splendid dome and beautiful gilding. The other edifice is octangular, and is called *El Sahara*. Here the Mohammedans show the footsteps of their prophet surrounded with a golden grate; and a Koran, which is four feet long, and two and a half broad. On the mount of Olives is to be seen a Christian church, in which is shown a foot-print of the Savior, which he left on the place, when he ascended to heaven. Besides many old Jewish monuments, there are a great many Greek and Roman, several Christian, and, especially, Gothic monuments, which originated in the times of the crusades.—A contemporary of Abraham, Melchisedec, is called *king of Salem*, 2000 years before Christ: this Salem is supposed to be the Jerusalem of after times. This town then came into the possession of the Jebusites, and when the Israelites conquered the land of promise (B. C. 1500), it was assigned, in the division of the country, to the tribe of Benjamin. The Jebusites, however, appear afterwards to have recovered possession of the place; for David conquered the city, called it after his name, and built the castle of Zion. His son Solomon greatly embellished the city, and caused the temple to be built by the skilful artists of Tyre. Under his successors, Jerusalem was the capital of the kingdom of Judah. Five times it was taken and plundered; first under Rehoboam by the Egyptians, then under Joram by the Arabians, under Joash by the Syrians, under Amaziah by the Israelites, and under Josiah by the Egyptians again (B. C. 611). Herodotus also mentions the last conquest of it, calling the city *Kadytas*, which resembles *Kedushah*, the Holy, and the Mohammedans still call the city *El Kods*. At last, the Chaldean king, Nebuchadnezzar, during the reign of Zedekiah, conquered the kingdom, razed the city to the ground (B. C. 586), and carried the Jews to Babylon. Seventy years after, Cyrus gave them permission to return and rebuild the city and temple. This was done under the direction of their high-priests, Ezra

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and Nehemiah, whose successors governed them a long time. The story of Alexander's making a pacific visit to Jerusalem, after his conquest of Tyre, is nothing but a Jewish invention, as Josephus is the only author who mentions it. Alexander's successor, Ptolemy, the son of Lagus, captured Jerusalem, and carried a great number of the better sort of Jews to Alexandria. It then remained, for a long time after it was taken by Antiochus the Great, under the jurisdiction of the Syrian kings. Under the Maccabees, the Jews were again free for a considerable time, and chose their own rulers. One of the last of these, Aristobulus, invited Pompey the Great into the country, and thus Jerusalem came under the Roman dominion (B. C. 64). But, as it continued to have its own kings, at least in name, and also high-priests, together with the Roman governors, this occasioned constant troubles, which were finally ended by the destruction of the city and extermination of the inhabitants, by Vespasian and Titus, after a bloody siege (A. D. 70). Some buildings, however, were left among the ruins. The Jews again collected together, built on the place, and again rebelled against the Romans. Provoked by this obstinacy, the emperor Adrian, at last, in the year 118, ordered all that Titus had spared to be destroyed. He commanded a new city to be built in its place, called *Ælia Capitolina*, in which no Jew was permitted to dwell. Constantine the Great, and his mother Helena, from pious motives, ordered all the heathen monuments to be destroyed, and erected many new Christian edifices. Julian conceived the idea of rebuilding the old temple of the Jews, but is said to have been hindered from executing his plan by the eruption of subterranean fire. The city remained under the government of the Eastern emperors till Chosroes, king of Persia, conquered it in the year 614. It was recovered, however, by the emperor Heraclius, in the peace of 628. This prince prohibited the Jews from dwelling there, and so alienated the patriarch of Jerusalem, Sophronius, by sectarian differences, that the Saracen caliph Omar found little difficulty in making himself master of the city (A. D. 637). From the Saracens it passed into the hands of the Turks. In the first crusade, Godfrey of Bouillon took Jerusalem. It was erected into a Christian kingdom, to which the Turks put an end in 1187. Clarke, Châteaubriand, &c., describe its present state.

JERUSALEM, John Frederic William, was born November 22, 1709, at Osn-

burg, where his father was a clergyman, and early displayed great talent. As early as 1724, he entered the university of Leipsic, where he studied theology. He then studied at Leyden, went with two young noblemen to the university of Göttingen, visited London, and was, in 1742, appointed, by the duke of Brunswick, court preacher and tutor of the hereditary prince. The *Collegium Carolinum*, afterwards so famous, was established on a plan suggested by him. In 1752, he was made abbot of the convent of Niddags-hausen, near Brunswick. The chancellorship of the university of Göttingen was offered to him, but he would not leave Brunswick, where his benevolent activity found full exercise. In his old age, his son destroyed himself in consequence of an unfortunate passion for a married lady. This gave rise to Göthe's Sorrows of the young Werther. The father died in 1789, esteemed by all Germany as a theologian, and for the purity and beneficence of his character. His sermons (Brunswick, 1788—1789, 2 vols.) are still read, as are also his Contemplations on the most Important Truths of Religion (1785 and 1795, 2 vols.) He wrote many other works, and is considered one of the best men of his time in Germany.

JESO, or JEDSO, or YEDSO, or JESSO, or MATSMAI; a large island in the North Pacific ocean, governed by a prince tributary to the emperor of Japan. The inhabitants are more rude and savage than the Japanese. They live chiefly on fish and game. Lon. 140° 10' to 147° 10' E.; lat. 42° to 45° N. Square miles, 53,000. Chief town, Matsmai.

JESSE; a man of Bethlehem, who lived by raising cattle; the father of eight sons, of whom David was one. When Saul persecuted the latter, Jesse fled into the land of the Moabites, where he seems to have died, as no mention is made of him after David's accession to the throne.

JESTER, or COURT FOOL. In the middle ages, every court, secular or ecclesiastical, had its fool, as a necessary appendage; and there are some instances of court jesters in the 18th century. Douce, in his Illustrations of Shakspeare, has a dissertation on the fools and clowns. He states that Muckle John was the last person who regularly held the office of court jester in England, his predecessor, Archy Armstrong, having been sentenced to have his coat pulled over his head, and to be dismissed the king's service, for a sarcasm on Laud (1637). Since the time of the commonwealth, the post of king's fool

has been discontinued, though some private persons had fools late in the last century. Swift wrote an epitaph on Dicky Pearce, the earl of Suffolk's fool (1728). Mr. Douce states that the costume of the domestic fool, in the time of Shakspeare, was of two sorts. The one was a motley or party-colored coat, attached to the body by a girdle, and often having bells on the skirts and elbows. The breeches and hose were in one, and sometimes the legs were of different colors. A hood, resembling a monk's cowl, covered the head completely, and the breast and shoulders partly. It sometimes bore ass's ears, sometimes the neck and head of a cock, and sometimes only the comb of that bird (whence *coxcomb*, as a term of contempt). The bawble (*marotte*) was a short stick, terminated with a fool's head, or with that of a doll or puppet. To this was frequently appended a blown bladder, sometimes filled with sand or peas, and employed as a weapon of sportive offence; sometimes a skin or bladder only, and sometimes a club instead of the bawble, and, occasionally, both together. The other dress, which seems to have been most common in the time of Shakspeare, was a long petticoat, of various colors, fringed with yellow. There were, however, many variations from this dress: bells supplied the place of the cock's comb; the head was shaven like a monk's crown; fox tails or squirrel tails were fastened on the clothes, &c. (See *Fools, Feast of.*)

JESUITS, or SOCIETY OF JESUS; a religious order, which rose in influence and power far above all the other orders, though strictly prohibiting its members to accept any office in the church, and which, in the art of ruling, excelled the governments of the world no less than its ecclesiastical rivals. No other religious order affords a parallel to this; for, while those who give themselves only to devotion and religious contemplation, present few distinguishing traits, and, for the most part, differ from one another only in their names, in the fashion and color of their dress, the greater or less strictness of their rules, the number of their penances and devotional exercises; and while those of the more active class, who operate abroad by their influence at courts and in families, and by engaging in offices of instruction, pastoral care, or charity, are almost universally but monks, the society of Jesus early raised itself to a degree of historical importance unparalleled in its kind. But a small part of this greatness is to be ascribed to their founder,

Ignatius Loyola (q. v.), who owes his fame more to the shrewd policy and energy of his successors than to the merit of the original scheme of the order. At the university of Paris, Loyola entered into an agreement with some of his fellow students to undertake the conversion of unbelievers, and a pilgrimage to Jerusalem. Pierre le Fevre (a Savoyard), Francis Xavier (a native of Navarre), James Lainez and Nicholas Bobadilla (two Spaniards of ardent and powerful minds), and Rodriguez, a Portuguese nobleman, were the first companions of Loyola. A war with the Turks prevented their journey to Jerusalem. They therefore went to different universities in Upper Italy, to gain new associates; Loyola himself went with Le Fevre and Lainez to Rome, where he accomplished, in 1539, his plan of founding a new and peculiarly organized order. He called it the *society of Jesus*, in consequence of a vision, and bound the members, in addition to the usual vows of poverty, chastity, and implicit obedience to their superiors, to a fourth, viz. to go, unhesitatingly, and without recompense, whithersoever the pope should send them, as missionaries for the conversion of infidels and heretics, or for the service of the church in any other way, and to devote all their powers and means to the accomplishment of the work. The novices, besides spiritual exercises, were to be proved by performing the most menial offices for the sick, Xavier having given the example by sucking the loathsome sores of the sick in the hospitals. A special bull of Paul III, in 1540, established this society, whose object appeared so favorable to the interests of the papal power; and in the following year, the members, assembled in Rome, chose their founder for their first general. He showed himself, however, unequal to the management of great affairs. As general, he was ever pursuing secondary objects, while his learned and more sagacious friends, especially Lúnez, who was his constant companion, contrived to improve and carry out his rude plans for the advancement of the society. The popes Paul III and Julius III, seeing what a support they would have in the Jesuits against the reformation, which was rapidly gaining ground, granted to them privileges such as no body of men, in church or state, had ever before obtained. They were permitted not only to enjoy all the rights of the mendicant and secular orders, and to be exempt from all episcopal and civil-jurisdiction and taxes, so that they acknowledged no authority but that of the

pope and the superiors of their order, and were permitted to exercise every priestly function, parochial rights notwithstanding, among all classes of men, even during an interdict,—but also (what is not even permitted to the archbishops unconditionally), they could absolve from all sins and ecclesiastical penalties, change the objects of the vows of the laity, acquire churches and estates without further papal sanction, erect houses for the order, and might, according to circumstances, dispense themselves from the observance of canonical hours of fasts and prohibitions of meats, and even from the use of the breviary. Besides this, their general was invested with unlimited power over the members; could send them on missions of every kind, even amongst excommunicated heretics; could appoint them professors of theology at his discretion, wherever he chose, and confer academical dignities, which were to be reckoned equal to those given by universities. These privileges, which secured to the Jesuits a spiritual power almost equal to that of the pope himself, together with a greater immunity, in point of religious observance, than the laity possessed, were granted them to aid their missionary labors, so that they might accommodate themselves to any profession or mode of life, among heretics and infidels, and be able, wherever they found admission, to organize Catholic churches without a further authority. But the latitude in which they understood their rights and immunities gave occasion to fear an unlimited extension and exercise of them, dangerous to all existing authority, civil and ecclesiastical, as the constitution of the order, and its erection into an independent monarchy in the bosom of other governments, assumed a more fixed character. A general dispersion of the members throughout society, with the most entire union and subordination, formed the basis of their constitution. The society of Jesus was accordingly divided into several ranks or classes. The novices, who were chosen from the most talented and well educated youths and men, without regard to birth and external circumstances, and were tried, for two years, in separate novitiate-houses, in all imaginable exercises of self-denial and obedience, to determine whether they would be useful to the purposes of the order, were not ranked among the actual members, the lowest of whom are the *secular coadjutors*, who take no monastic vows, and may therefore be dismissed. They serve the order partly as subalterns, partly as confederates, and may

be regarded as the people of the Jesuit state. Distinguished laymen, public officers, and other influential personages (e. g. Louis XIV in his old age), were sometimes honored with admission into this class, to promote the interests of the order. Higher in rank stand the *scholars* and *spiritual coadjutors*, who are instructed in the higher branches of learning, take upon them solemn monastic vows, and are bound to devote themselves particularly to the education of youth. These are, as it were, the artists of the Jesuit community, are employed as professors in academies, as preachers in cities and at courts, as rectors and professors in colleges, as tutors and spiritual guides in families which they wish to gain or to watch, and as assistants in the missions. Finally, the nobility, or highest class, is made up of the *professed*, amongst whom are admitted only the most experienced members, whose address, energy and fidelity to the order have been eminently tried and proved. They make profession, i. e. take the vows of their order, by binding themselves, in addition to the common monastic vows, by a fourth vow, to the undertaking of missions; and, when they are not living together in pious ease in their professed-houses, they serve as missionaries among heathens and heretics, as governors of colonies in remote parts of the world, as father-confessors of princes, and as residents of the order in places where it has no college. They are entirely exempt, on the other hand, from the care of the education of youth. None but the professed have a voice in the election of a general, who must himself be of their number, and who has the right of choosing from them the assistants, provincials, superiors and rectors. The general holds his office for life, and has his residence in Rome, where he is attended by a monitor and five assistants or counsellors, who also represent the five chief nations,—the Italians, Germans, French, Spanish and Portuguese. He is the centre of the government of the whole order, and receives monthly reports from the provincials, and one every quarter from the superiors of the professed-houses, from the rectors of the colleges (which are the monasteries of the order, but with nothing very monastic about them), and from the masters of the novitiates. These reports detail all remarkable occurrences, political events, and the characters, capacities and services of individual members, and thereupon the general directs what is to be done, and how to make use of tried and approved

members. All are bound to obey him implicitly, and even contrary to their own convictions. There is no appeal from his orders. He may even alter particular rules of the society, expel members without trial, or exile them by sending them away to some distant place, and inflict or remit punishments at his pleasure. Ignatius Loyola, who died July 31, 1556, at Rome, left to the order the sketch of this constitution, and a mystical treatise called *Exercitia Spiritualia* (Spiritual Exercises), the use of which was formally introduced among the Jesuits, and occupies the first four weeks of every novice. This pious enthusiast, but by no means great man, obtained a lasting fame, and the honor of canonization (1622), by the rapid increase of his order, which, as early as 1556, numbered 1000 members in 12 provinces. The first was Portugal, where Xavier and Rodriguez, at the invitation of the king, had founded colleges. The increase of the Jesuits was no less rapid in the Italian states, where they were supported by the influence of the pope; in Spain, where they were, at first, opposed by the bishops, but soon prevailed through the example of the nobility, especially of one of the most powerful grandees, Francis Borgia, duke of Candia, who became an *Inghist* (as the Jesuits were called in Spain, after their founder, Inigo); and in Catholic Germany, where Austria and Bavaria granted them privileges and foundations. At the universities of Vienna, Prague and Ingolstadt, they obtained an ascendancy which they held for two centuries. In their strict hierarchical principles, in their restless, zealous activity, and in their success in making converts, the Catholic princes, as well as the pope himself, found the most effectual barrier against the growing power of Protestantism. Even to the common people they soon recommended themselves, as the offspring of the new spirit of the times, and were, therefore, readily favored by persons who were ill-disposed to the monks. For institutions which would not adopt the tendency of the age towards practical improvement and a more cheerful tone of conduct, could no longer succeed, after the restoration of learning and sound reasoning; the excited world preferred business to contemplation, and the mendicant monks, who had every where pushed themselves into notice, had passed their most splendid epoch. Those who disliked the Franciscans as too coarse and vulgar, and the Dominicans as too rigid and gloomy, were the better pleased with the polished,

cheerful and social Jesuits. Nobody could accuse them of idle brooding in prayer and psalm-singing; even in the houses of the professed, the canonical hours were not observed; they no where remained long at their exercises of devotion, even as the spiritual guides of the laity; they carefully avoided all appearance of spiritual pride, and dressed like the secular clergy, and might even change this dress for the ordinary garb of the country, in places where they thought to gain easier entrance without any such mark of distinction. Besides this, they were directed to use a gentle demeanor while engaged in their religious or political operations; to win men by compliance with their peculiarities; never to contend openly, even against declared enemies; and never to betray any passion; but to keep their views and measures secret, and, under a show of coldness and reserve, to prosecute the more ardently and constantly, in secret, what might have excited opposition if made public. This spirit of worldly policy, and accommodation to circumstances, was principally derived from the artful principles of their second general, James Lainez, who had the address to soften what was austere and monastic in the regulations of the founder, and to adapt them, according to the circumstances of the times, to the object of the society. This was originally nothing else but the preservation and establishment of the papal power against all the attacks of Protestantism, of kings, and national bishops. To this end the Jesuits systematically labored, under the pretext of promoting religion or the honor of God (*In majorem Dei gloriam*, as the inscription is on their arms); and, as nothing appeared more conducive to their purpose than the subjection of the mind and of public opinion, they gained dominion over the young by the establishment of schools, and over the adult by confession, preaching, and the common intercourse of society. When Lainez died, in 1564, this system, and the active, energetic spirit belonging to it, had already become decidedly fixed in the internal character of the order, so that the example of monastic devotion held up by his successor, Francis Borgia, who was afterwards canonized, and the efforts of popes Paul IV and Pius V to restore the observance of the canonical hours, proved ineffectual. The succeeding popes and generals allowed the order perfect freedom from all monastic constraint, and the wisdom of its system soon appeared evident in the important successes and ser-

VICES which it accomplished. Their foreign missions, begun by Francis Xavier, in the Portuguese East Indies, in 1541, were attended with vast and unprecedented success, if their own accounts may be trusted. He converted, with the aid of his fellow missionaries who were sent to assist him, some hundred thousands to Christianity in Goa, Travancore, Cochin, Malacca, Ceylon, and even in Japan, and died (1551) on his way to China, with the fame of a true martyr for religion, which gained for him the name of the *apostle of India*, and the honor of canonization. His triumphs over heathenism were confirmed by the cruelties of the inquisition at Goa, while other Jesuits went to South America, and labored successfully in the civilization and subjugation of the natives in Brazil, and in the neighboring country of Paraguay. (q. v.) Africa alone resisted their efforts; on the western coasts they never gained a settlement, and from the east they were driven by the Copts; while the Abyssinians, whom they had governed for a long time with the aid of Portugal, rose against them, and put them to death. But in Europe, their influence rapidly increased. Their efforts were chiefly instrumental in removing the impressions, so dangerous to the Catholic church, which the reformation had left even in Catholic countries. They carried out upon a grand scale, and for the higher classes, the improvements in the system of instruction, which had been already begun by the Barnabites, the fathers of the Christian doctrine, those of Somasqu and of the oratory, and, finally, by the Piarists, for the humbler classes of the community. Claudius Aquaviva, of the family of the dukes of Atri, general of the Jesuits from 1581 to 1615, was the author of their system of education, and his work, *Ratio et Institutio Studiorum Societatis Jesu*, is the platform of the far-famed schools of the Jesuits. These were partly boarding-schools for boys of all classes, and partly seminaries for those youths who were intended for the order, in which they staid till their entrance upon their novitiate. The scholars (so called) and coadjutors, living together in the colleges, gave instruction by methods well suited to the wants of the young, and accompanied with surprising success, so as to be considered as worthy of imitation even in the 18th century. A free, affable and affectionate manner towards the pupils, united with unceasing vigilance and a wise solicitude for the preservation of their innocence and virtue, distinguished these

above all other monastic schools. Love and confidence prevailed in them. To excite emulation, and to animate industry, they had public exercises in speaking, and distributed prizes and titles of distinction. To strengthen and develop the body, gymnastic exercises were introduced, and even the outward demeanor and address were polished by theatrical representations. It is true that these last, which were intended to allure the public, and the miserable Latin which the pupils were often obliged to speak in the plays, were not the bright side of the Jesuit schools. The want of deep critical learning, and the arbitrary mutilation of the old classics for the use of the young, exposed the Jesuit teachers to the censure of the philologist. Nevertheless, the schools had an uncommon success, as the best of that time. A single college frequently had several hundred scholars; the young nobility were almost exclusively sent to them, and even from Protestant countries, so that the Protestants found it necessary to establish lyceums and academies for the gentry, of a character suited to the higher demands of the age. The Jesuits derived the greatest advantage from these institutions, by being enabled to choose the brightest geniuses at an early age, and mould them to their purposes. This explains how the society of Jesus was able to render important services to the cause of literature and science. Such Jesuits as Serrarius, Petavius, Sirmond, Tursellinus, Bellarmin, Balde, Mariana and Flechier advanced the sciences of history and geography, the study of language and rhetoric, even beyond the limits of their own order and church. Scheiner and Boscovich were eminent in mathematics and astronomy. No men understood better than the Jesuits the art of showing off, to the best advantage, their really valuable services; the world could not but acknowledge them to be improvers and benefactors of their age. Accordingly, their houses and possessions visibly increased, their churches and confessionals were not empty; they contrived, too, with much address, to obtain legacies and presents, and to seize upon every advantage which pious credulity and the extent of their connexions presented them. They would not allow their internal constitution to be inquired into or imitated; and when, in 1623, a number of enterprising females in Italy, and on the Lower Rhine, formed a plan of uniting into an order, under the name of the *Jesuitines*, to be modelled after the society of Jesus, they repulsed

all the advances of their would-be sisters, and, in 1631, procured a papal decree for the abolition of the new order. But in England, and the Protestant states of the North, they were not so successful, their repeated attempts to establish themselves there proving fruitless. In 1618, however, the number of members amounted to 13,112, in 32 provinces, without including those in France, the Rhenish provinces, and the Netherlands, Poland and Lithuania, Spanish America, the Philippines and China. Elated with this success, they celebrated, in 1640, under general Vitelleschi, the centennial anniversary of their order, with great pomp. There were some circumstances, however, to damp their exultation; for, notwithstanding the great favor which they enjoyed at court and among the people, the non-Jesuit clergy and the learned men of the age soon discovered the mischief which the society was beginning to do through Christendom. The universities, bishops and clergymen found their interest opposed to that of the Jesuits, whose privileges, where they were carried into effect, would be necessarily injurious and oppressive to the body of teachers and the clergy. The ancient orders of monks, whose hatred they had excited by their encroachments on their province, as much as by their good fortune, found subject enough for complaint and bitter accusations in the duplicity and worldliness of their conduct. They made no scruple of invading what had been regarded as the appropriate province of other orders, and were on the best terms with the Carthusians, who, on account of their vow of silence, were the only ecclesiastics, out of their own body, to whom the Jesuits were permitted to make confession. Their busy, intriguing spirit made them the objects of suspicion and jealousy to statesmen and jurists, on account of their interference in political affairs, the mischievous effects of which were already manifest in Portugal, under the reigns of John III and Sebastian, their pupils, and, after the death of the latter, were a principal cause of the surrender of this kingdom to the Spanish crown. For this reason, the parliament and higher clergy of France, for 20 years, resolutely resisted the attempts of the Jesuits to gain a footing in that country. The university of Paris also declared the whole order to be useless, and its existence incompatible with the rights of the Gallican church. It was owing chiefly to the favor of the court, that they at last, in 1562, were admitted into France under the name of

fathers of the college of Clermont, with a humiliating renunciation of their most important privileges. Notwithstanding this depressed condition, they soon contrived to establish themselves in Paris and the southern and western provinces, and, during the civil commotions, under the protection of the Guises, to deprive the French Protestants of their rights, gradually to establish their privileges, and to maintain their footing, in spite of the suspicions entertained of their having had a share in the murder of Henry III. They were banished, indeed, in 1594, on account of the attempt upon Henry's life by their pupil, John Chatel; yet they still remained undisturbed in Toulon and Bourdeaux, and, at the intercession of the pope, were again received by Henry IV, in 1603. They soon, in their office of court-confessors, carried on the same intrigues as before. Their participation in the crime of Ravailiac, though exceedingly probable, could not be proved against them; they themselves joined in condemning the book in which the Spanish Jesuit Mariana defends the king's assassination, and, by cunning and obsequiousness towards the court, preserved themselves undisturbed. They made themselves still more important to the German empire, when they became the confidential advisers of Ferdinand II and III. They discovered remarkable political talent in the thirty years' war; the league of the Catholics could do nothing without them. Father Lamormain, a Jesuit, and confessor to the emperor, effected the downfall of Wallenstein, and, by means of his agents, kept the jealous Bavarians in their alliance with Austria. But, while they were thus successful, as statesmen, in this part of Europe (though they failed in preventing the triumph of toleration at the peace of Westphalia), a new storm burst upon them, in France and the Netherlands, from the Jansenist controversy. The ancient hostility of the university of Paris, which had always been strongly averse to the admission of the Jesuits as teachers, rose up, in union with the rigid morality of the Jansenists, against the notorious semi-Pelagianism of Molina and his brother Jesuits. (See *Grace*, and *Jansenius*.) The character of the Jesuits received a fatal wound from the pen of Pascal, whose famous Provincial Letters exposed the mischievous doctrines and practices of the Jesuits with admirable wit and argument, to which they opposed little but abuse and violence. These letters, which have been published in numerous editions since

1656, were read through all Europe, and their testimony quoted in the sentence of condemnation pronounced by Innocent IX, in 1679, against 65 offensive propositions, mostly of Jesuit casuists. But it availed them little that royal decrees and papal bulls, procured by the Jesuit confessors of Louis XIV (La Chaise and Le Tellier), were levelled against Jansenism, and its ruin completed by the well-known constitution *Unigenitus*. In the minds of reflecting and well-disposed persons, they still remained suspected of an attachment to the principles of their most eminent casuists, attacked by Pascal—principles which afforded the most startling solution of their crafty and ambiguous conduct. A lax morality, accommodated to the inclinations of a licentious age, which made interest and external circumstances the rule of conduct, and consecrated the worst means for a good end; their probabilism,—a system of principles and rules of life which tolerated every thing that could be defended as probably admissible; their excuses for perjury and crimes of all kinds, sometimes by arbitrary perversion of language, sometimes by ambiguous expressions and perplexing interpretations, sometimes, too, by mental reservations, according to which a man had only to think differently from what he said and did, to be justified, in his own sight, from the greatest crimes;—these, and other traits of a like nature, may be more fully and accurately learnt from the letters of Pascal, or the writings of the Jesuits, Sanchez, Bauny, Escobar, Suarez and Busembaum. Their own defences against these charges only confirmed the suspicion excited against their system of morals, while they palliated and conceded a part where the whole was culpable. Other accusations were now brought against them, which they were still less able to repel. Their superficial mode of instruction, and the theatrical disorders of their schools, had been already condemned by Mariana, a learned Spanish Jesuit; the gross selfishness of the order had been publicly exposed in Sciotti's *Monarchia solipsorum*; the indifference with which they permitted their heathen converts to continue their old worship of idols, on condition of their mentally adoring, at the same time, Christ and the virgin Mary; and their want of agreement with the other missionaries in China, had been warmly, but ineffectually, censured by several papal bulls. Their conduct, too, was now and then discovered to harmonize too well with their indulgent code of ethics, as

they were not always prudent enough in the commission of their excesses; and it was for this reason that the Iroquois, who had been converted by them, expressly stipulated in a treaty of peace (1682) for the removal of these licentious brethren, who did every thing that Jesus did not do. It was even found necessary to expel them from some of the Italian states for their licentiousness; and the horror which was felt through Europe at the trial of the Jesuit Girard, for the alleged violation of Cadière, an innocent girl, at the time of confession, is hardly yet forgotten. It was now becoming, every day, more evident to the world, that the Jesuits were not aiming to promote virtue and religion, but their own interests. This was confirmed by the complaints of merchants at the extensive traffic of the society of Jesus in the products of their foreign missionary stations. It cannot be denied that the republic of natives, formed by them, under the authority of Spain, in Paraguay and Uruguay, in which they ruled with absolute power, and which, in 1753, contained nearly 100,000 subjects, was conducted by them with consummate policy and skill, and was, perhaps, the best means for civilizing those savages; but that they made it also a trafficking establishment for the emolument of the order, was shown on occasion of a treaty of commerce, by which Spain, in 1750, gave up seven districts of this country to Portugal. The resistance which the natives made to the Portuguese, with an army of 14,000 men, commanded by Jesuits, finally obliged the contracting powers to annul the treaty. The Portuguese Jesuits, though they disclaimed all concern in this affair, underwent a prosecution, which was not terminated, when an attempt upon the life of the king of Portugal hastened their downfall. The minister Pombal made out their agency in this attempt to a high degree of probability, and finally succeeded, in 1759, in expelling them from Portugal, and confiscating their possessions, by an edict, in which the king declared them guilty of high treason. Before this first blow, the order consisted of 24 professed-houses, 669 colleges, 176 seminaries, 61 novitiate-houses, 335 residences, and 273 missions in heathen and Protestant countries, and 22,589 members of all ranks, half of whom were ordained priests. In France, where Choiseul and Pompadour were unfavorably disposed towards them, their ruin was occasioned by the trade which they continued to carry on, in spite of all the pope's orders to the con-

trary. In 1743, they had established a trading-house at Martinique, by their deputy, father La Valette, under pretence of a mission, which soon monopolized nearly the whole trade of that and the neighboring islands, and had commercial connexions with the principal merchants of France. It happened that two ships, with a cargo valued at two millions, which had been sent by La Valette to pay the house of Lioncy, at Marseilles, fell into the hands of the English. The Jesuits refusing to make any indemnification for the loss, the above-mentioned house brought an action against them, which terminated in the sentencing of the former to make full reimbursement, and was the means, also, of bringing to light other abuses of the order. Lorenzo Ricci, their general, refusing to make any change in their constitution, by the declaration, *Sint ut sunt, aut non sint* (Let them be as they are, or not be), the king issued a decree, in 1764, for abolishing the order, in all the French states, as a mere political society, dangerous to religion, whose object was self-aggrandizement. In vain did Clement XIII, in a bull issued at the same time, recommend the Jesuits as the most pious and useful members of the church. They were also driven out of Spain, in 1767, and soon after from Naples, Parma and Malta, by the efforts of Choiseul and the Spanish minister Aranda. The voice of public opinion at length compelled pope Clement XIV to publish his famous bull, *Dominus ac Redemptor noster*, of July 21, 1773, by which the society of Jesus was totally abolished in all the states of Christendom. These measures were every where executed with a quick and strong hand, because a formal process would have given time for a formidable opposition. Yet their most important treasures and documents were already taken out of the way, as it is supposed, and their archives and coffers did not satisfy expectation. Ricci, who might have averted this fate by making some concessions towards a change in their constitution, protested the innocence of the order, which was bound to regard every thing which came from him as necessarily right and obligatory; but, in fact, the great infringements on the natural rights of others, incompatible with every well-ordered church or state, which were in a manner legalized by their privileges, rendered the existence of such a body in a state a political solecism. Unquestionably the world had much reason to rejoice at their fall, although a great part of the members were

entirely innocent; and their former services will always be gratefully remembered. The ex-Jesuits, however, suffered no further penalty than being obliged to quit their houses, lay aside the garb of their order, renounce all intercourse with one another, and either enter some of the other orders, or put themselves under the superintendence of the bishops. They received annuities from the revenues of their confiscated estates, except in Portugal. In this kingdom, and in Spain, the ex-Jesuits were also prohibited from residing in the country; while, in the States of the Church, in Upper Italy, and in Germany, where they were treated with the most forbearance, in Hungary, Poland, and even in France, they were suffered to remain as private persons. Frederic II, indeed, would not join in the general expulsion of the order, in order to gratify his Catholic subjects in Silesia, to retain a school-establishment which cost him nothing, and to keep a productive source of revenue. Nevertheless, the Jesuits in the Prussian states were obliged to give up the garb of their order, and to renounce their constitution. Under the name of the *priests of the royal school-institute*, they were henceforth confined to the office of instructing youth; and even this institution was abolished by Frederic William II. Russia was now the only country that remained to them. Peter the Great had expelled them from his empire as early as 1719; but, in 1772, several houses of their order fell, with the eastern part of Poland, under the dominion of Russia. Catharine spared them, even after the abolition of the order, out of regard to her Catholic subjects, and on account of the usefulness of their schools. The patronage of Czernitscheff and Potemkin enabled them to obtain permission to erect a novitiate-house in 1779, and in 1782 to choose a vicar-general. Meanwhile, circumstances had taken a favorable turn for them in Rome. Clement XIV died 1774, and his successor soon showed himself the friend of the society, which was yet very far from being extinct. The ex-Jesuits, who were deprived at once of their offices by the decrees of abolition, having been condemned unheard, still remained respectable clergymen, who had powerful friends in all classes, and were intrusted with important stations in the church and offices of instruction. In the year 1780, there were 9000 of them out of Italy, who were thought to maintain a constant union, under private directors or superiors; they were also thought to have possessed them-

selves of the secrets of the Rosicrucians, and to have taken a part in the schemes of the Illuminati. They were charged, moreover, with a plot to destroy Protestantism. But the clamor against them was, no doubt, often unfounded. By *Jesuitism* was still understood, not only the opposition to all ideas and institutions unfavorable to the Roman church, but also the sly and insidious arts of intrigue, the acting according to the principle that "the end sanctifies the means," the concealed movements of a manœuvring ambition, under the mask of piety and devotion to the public good, which had become a second nature with many of the followers of Loyola. Undaunted by these assaults of an often unjust prejudice, the ex-Jesuits, firmly united to each other, were hoping in the meanwhile for the restoration of their order, on which, according to their belief, the welfare of mankind depends. An attempt, in 1787, to revive their order, under the name of *Vicentines*, was unsuccessful. The *fathers of the faith*, an ecclesiastical order founded by Paccanari, a Tyrolese enthusiast, and formerly a soldier of the pope, under the patronage of the arch-duchess Mariana, was composed mostly of Jesuits, and put in operation at Rome, by the aid of the easily persuaded pope, as a new form of the society of Jesus, under altered regulations; but they were never recognised, by the secret superiors of the ancient Jesuits, as their brethren. The plans of the Jesuits were aided by Pius VII. He established their order in White Russia and Lithuania, where it continued in operation, but confined to offices of teaching and priestly duties, under the vicar-general, Daniel Gruber; and silently restored them, in 1804, in the island of Sicily, which was entirely separated from Europe by the fate of the continent. Hence it excited no surprise, among observing men, that this pope, who, in 1806, had canonized a Jesuit, should make use of the first opportunity to revive the order. The bull issued to this effect (*Solicitudo omnium*, Aug. 7, 1814), speaks of urgent entreaties and a general desire of the Christian princes and bishops for the restoration of the society, which restoration it calls a *repristinatio*, thereby intimating that it would appear again in precisely the same form in which it had fallen. Accordingly, the novitiate at Rome was solemnly opened, Nov. 11, 1814, and about 40 men, mostly eminent for rank and attainments, have since been admitted. In 1824, they took possession of the *collegium Romanum* in that city.

In 1815, a college was granted them at Modena, and they did not delay to accept the invitations of the kings of Sardinia, Naples and Spain. Ferdinand VII (May 29, 1815) reinstated them in the possession of all the privileges and property which had been taken from them in 1767. He subsequently appointed St. Ignatius captain-general of the Spanish army, and conferred on him the grand cross of the order of Charles III. The Helvetic canton of Friburg, also (Sept. 15, 1818), restored the old Jesuit college, formerly established there, for the instruction of youth. The Spanish revolution of March, 1820, was followed by their banishment from the kingdom; but they were restored again at the reestablishment of absolute power in 1823. Thus, in the conduct and the fortunes of the order, have been fulfilled the prophetic words of their third general, Francis Borgia: "Like lambs have we crept into power, like wolves have we used it, like dogs shall we be driven out, but like eagles shall we renew our youth." Portugal alone steadfastly adhered to its ordinance of Sept. 3, 1759, which banished the Jesuits out of the kingdom. Germany has hitherto refused to admit them; but the Paccanarists and Redemptorists in Austria have much in common with this society: some of the Jesuits, indeed, were allowed to take refuge there, after their banishment from Russia, but were commanded, in 1825, on pain of exile, to acknowledge the archbishop of the province as their supreme head. In France, the ultra-royalists succeeded in causing their presence to be connived at, and they already had congregations and seminaries at Montrouge, St. Acheul, &c., previous to the late revolution. In Russia, where they had been expelled by Peter the Great, and readmitted by Catharine II, it appeared that they were using their endeavors to win over the sons and daughters of distinguished families to the Catholic church, and they were banished in consequence, by an ukase of Jan. 1, 1817, from Moscow and Petersburg. But, still carrying on their proselyting schemes, and making themselves obnoxious to the government by secret intrigues of all sorts, an imperial ukase of March 25, 1820, abolished their order forever in Russia and Poland, and provided that the whole body of its members should be transported beyond the boundaries of these two countries, at the expense of the government, having regard to the age and bodily condition of individuals; that the valuable estates of the order should be confiscated,

and the academy at Polotzk abolished. In England, the tolerating spirit of the British constitution has permitted them, for the last 30 years, to have a college at Stonyhurst, near Preston in Lancashire, with an academy of 500 pupils, and several smaller boarding-schools, from which they carry on with success, the propagation of the Catholic faith. (See Dallas's *History of the Jesuits*, London 1816.)* They have also three colleges in Piedmont, one in Ferrara, one in Ireland, one in Friburg in Switzerland, and two colleges in the United States, one in Georgetown, in the district of Columbia, the other at St. Louis, Missouri. The Jesuits have outlived their power; the age rejects them. The world is ruled by a spirit with which this fraternity, now inconsiderable in point of numbers, talent and influence, could not keep pace. The sagacious statesmen of the present day need not to be reminded of the answer of Maintenon, the mistress of the great patron of the Jesuits, who, on having chosen Lazarists for the spiritual guides of her pupils at St. Cyr, was asked why she had not taken Jesuits; "Because," she replied, "I would be mistress in my own house." The order originated in a wise view of the state of the world on the part of leading Catholics, who saw that the rapid advances of the Protestants in learning and science would soon throw the old system of ignorant mendicant orders into contempt. They therefore trained a new race of combatants for the church in the use of intellectual weapons; but the advantages, which they thus obtained originally, have been lost in the general spread of intelligence, and the Jesuits are now considered as a part of the old regime, and no longer influence public opinion. Their conduct of late years in France has not tended to restore their popularity. The disposition to adapt them to the new order of things, however, has been shown in the acquittal, by the court of Rome, of two Jesuits charged with having spoken well of republics, on the ground that, being citizens of the U. States, they had a right

* By the Catholic relief bill (April 13, 1829) it is required that every Jesuit in the United Kingdom shall register his name and place of residence with a clerk of the peace; that any member of the order who shall enter the realm shall be guilty of a misdemeanor, and, on conviction, be banished for life (any natural born subject out of the realm, being a Jesuit, is, however, permitted to return); the admission of any person to the order is also forbidden; both those admitted and the members who administer the engagement are liable to fine and imprisonment, or banishment.

to defend republican principles. A Universal History of the Jesuits was published by Wolf (second edition, Leipsic, 1803, 4 vols.). An important historical work, drawn from the first sources, appeared at Leipsic, in 1820, called *Catechismo dei Gesuiti* (Catechism of the Jesuits). The *Monita secreta Societatis Jesu* (Paderborn, 1661) have been reprinted in Latin and German, at Aix-la-Chapelle, 1825, with a report of M. Portalis, respecting the *Pères de la Foi*. The genuineness of these *Monita*, &c., however, is not fully established. See, also, *Hist. des Confesseurs des Empereurs, des Rois, &c.*, by M. Grégoire (Paris, 1824); also *Précis de l'Histoire générale de la Compagnie de Jésus, suivi des Monita secreta*, by Arn. Scheffer (Paris, 1824); De Pradt, *Du Jésuitisme ancien et moderne* (Paris, 1826); and *Les Jesuites modernes*, by abbé Marcial Marcet de la Roche Arnauld, formerly a Jesuit (Paris 1826). (See the following article.)

JESUITS [written by a Jesuit. In the preceding article, the opinions of the opponents of the Jesuits are given, and we propose now to give a brief outline of the views of the Jesuits themselves respecting their order, taken from the article *Jesuits*, written by one of this society, for the *Conversations-Lexicon*].—The middle ages had ended. It was no longer a question whether the exercise of simple faith was sufficient; societies formed for the contemplative life—the monks—could, in future, have but a subordinate value for the church: the question was now, how to find effectual means to save the Catholic religion and church against the attacks of the spirit of innovation. As action, in the natural world, always produces reaction, so is it in the moral world. A new order originated in the church—the Jesuits. It is true, the intention of Ignatius Loyola was originally directed rather to mystic and ascetic contemplations; but the order soon took a shape adapted to the wants of the church. Ignatius Loyola was a Spaniard of a very warm imagination and great sensibility, which early awakened in him a zeal for religion. After having served against the infidels, he founded a religious society. In the convent of Montserrat, in an almost inaccessible wilderness of Catalonia, he copied the rules of a holy life, which an abbot, cousin to cardinal Ximenes, the minister of state, had prescribed. The inflamed mind of Ignatius saw Mary, the mother of Jesus, in a vision: she gave him the power of chastity. Jesus and Satan appeared to him in the form of military officers enlisting men for

service: he followed Christ. The order was founded in 1540. After the death of the founder, the society was further developed by Lainez, and, after him, by Aquaviva, men of deep knowledge of mankind, and steadfast purpose, the real authors of the society, which, as John Müller said, deserves to be compared with the great institutions of the lawgivers of antiquity. The object of the society was, as it is described in their constitutions, to devote all their powers to the salvation and perfection of their souls and those of their neighbors, and to occupy themselves for this end in all places, according to the direction of their superiors. The society designated their object by the motto of Ignatius—*Omnia ad majorem Dei gloriam*. Severe trials, constant inspection, unconditional obedience in permitted things, insured the intimate union of the society, as well as the ability and purity of its members. A strictly decorous exterior was enjoined. No Jesuit was allowed to confess a woman, except in the presence of another Jesuit. Money a Jesuit never was allowed to take for masses. The seat of the society was in so far in Rome, as the general of the order resided there, with the committee of the society, and the monitor, who, totally independent of him, controlled the general as if he were his conscience. The order was divided into provinces, each of which was superintended by a provincial. Under the care of these officers were the professed-houses, with each a *prepositus* at its head, and the colleges, with each a rector. In the latter, there were also novices. The mutual dependence of all parts of the system resembled the structure of a well-built fabric: the relations of subordination were so ordered that the society was *simplex duntaxat unum*, without interrupting the free will of the individual, who only had to obey in permitted things. The Jesuits were active, first, as teachers of youth. Lord Bacon says of them, that, when he considered the assiduity with which they gave themselves to the cultivation of science and the maintenance of pure morals, he always thought of what Agesilaus said to Pharnabazus, "As thou art such, I wish thou wert one of ours;" and that, in regard to the method of teaching, the Jesuit schools ought to be taken for models, because, of every mode which had been attempted, none was so good as theirs. Thus far Bacon. But what gave the greatest value to their mode of education was, that with them, religion ruled over every thing: they formed Catholic Christians

of a sound mind, not unsettled spirits, like the youth of our times. Their care for the purity of youth was remarkable; and ought they to be reproached because, with this view, they mutilated the classics? A chief object of the Jesuits was the defence of the church against Protestantism. There is no doubt that the reformation would have spread much farther, had not the Loyolites fought for the church. If they were thus anxious to preserve Catholic souls, on the other hand they were not less active to propagate the gospel in distant countries. They took the usual vows of the orders—chastity, poverty and obedience; the latter in so extended a sense, that they were willing to go on any missions. With apostolic zeal, they devoted themselves to the task of converting the heathen. In the heart of Asia, in Japan, and on the Moluccas, they erected the sign of the crucified Redeemer, and preached the doctrines of the gospel: they taught it in China, in both the Indies, in Ethiopia, and among the Caffres. When the church was persecuted in Japan, the Jesuits all became martyrs. One only, Christopher Ferreira, wavered. Exhausted by long continued torments, and by the expectation of still greater ones, he, in a weak hour, was induced to sacrifice to the Japanese gods. But hardly had the news of this deplorable event arrived in Europe, when Jesuits from all the provinces offered themselves as missionaries to Japan, and begged for permission to go there as a favor. Their object was either to bring back Ferreira to the church and the order, or to wash out, with their own blood, the stain of his ignominy. All who were now sent to Japan suffered martyrdom immediately. Ferreira's conscience was soon awakened again: he repented, and went before the magistrates, acknowledging himself a Christian. He was tortured for eight days, in every possible way, and was at last sunk into the Japanese den of death, where, after seven days, death put an end to his torments and repentance. In the other hemisphere, the Jesuits penetrated into the North. The Hurons were civilized, and Canada ceased to be the residence of barbarians only. Others civilized other tribes in the inclement California, and united them into Christian communities.* At the same time, others traversed

the regions north of Mexico, inhabited by wandering tribes, whom no missionary had ever visited before. Others continued the work of conversion in South America, in Brazil, Paraguay, &c. In this region, where the Spaniards had done nothing but murder and pillage, the Jesuits restored humanity to its rights, and brought the European name once more to honor. Their state Paraguay was one of the most beautiful creations in history. Whatever poets and philosophers have fabled of the golden age and the world of innocence, the Jesuits, as Raynal says, realized in a distant zone. Raynal, certainly an unsuspected witness, observes, "Perhaps so much good has never been done to men with so little injury. The people of Paraguay had no civil laws, because they knew of no property; nor had they criminal ones, because every one was his own accuser, and voluntarily submitted to punishment. Their only laws were the precepts of religion. There was no distinction of stations, and it is the only society on earth where men enjoyed equality. None were idle, or fatigued with labor. The food was equal, in wholesomeness, plenty and quality, for all the citizens; every one was conveniently lodged, and well clothed; the aged and the sick, the widows and orphans, were assisted in a manner unknown in other parts of the world. Every one married from choice, and not from interest, and a number of children was considered as a blessing, and could never be burdensome. Debauchery, the necessary consequence of idleness, which equally corrupts the opulent and the poor, never tended to abridge the duration of human life; nothing served to excite artificial passions, or contradicted those that are regulated by nature and reason. The people enjoyed the advantages of trade, and were not exposed to the contagion of vice and luxury. Plentiful magazines, and a friendly intercourse between nations united in the bonds of the same religion, were a security against any scarcity that might happen from the inconstancy or inclemency of the seasons. Public justice had never been reduced to the cruel necessity of condemning a single malefactor to death, to ignominy, or to any punishment of long duration; and the very names of taxes and lawsuits—those two terrible scourges which every where else afflict mankind—were unknown." It will not now surprise us, that Montesquieu, in his *Espr. des Loix* (liv. iv, ch. 6), Buffon, in his *Contemplations on the Variety of Human Races*, Albert von

* The well-known barbarous state of the above-mentioned tribes will lead the reader to qualify the meaning of the words *civilization* and *conversion* in other parts of the above article.—ED.

Haller, in his miscellaneous treatises on several subjects of politics and morals, Robertson, in his classical History of Charles V, and Muratori, mention, with enthusiasm, the services of the Jesuits as missionaries. Respecting the service which they have rendered to science, there is almost but one voice. No branch was excluded from their care. In theology, they were distinguished teachers: yet their enemies—and they had many, not only among the Protestants, but among the Catholics, and among these latter the most vehement, because of their great privileges, their freedom from the monkish spirit, and their great acquirements—have reproached them with maintaining many odious opinions. They are said to have defended the murder of tyrants. No charge could be more false. Even 126 years before the foundation of the order of Jesuits, John Petit, doctor of the university of Paris, asserted, without any qualification, the legality of the murder of a tyrant. The cause was the murder of the duke of Orleans, in broad day, in the streets of Paris, at the instigation of the duke of Burgundy, his competitor for the regency of the realm during the insanity of Charles VI. John Petit wrote a defence for the duke of Burgundy, in which he defends this horrid act, on the ground that the murder of tyrants is justifiable. The archbishop of Paris condemned this publication; but several French theologians, among whom there were even bishops, defended John Petit's doctrine; and when, some years after, Chaler, a doctor of the Sorbonne, denounced Petit's doctrine, at the council of Constance, before the assembled fathers, Martin Porre, bishop of Arras, defended it as being a doctrine which had been maintained by many learned men and theologians without contradiction. The council was at first undecided, but, at last, condemned, not all the positions of John Petit, but only this one: "Every tyrant may be legally killed by his subjects." According to this sentence, it appears as if the murder of tyrants is permitted under certain circumstances, and this question became a common subject of investigation among the theologians and scholars of the fifteenth century, and down to the middle of the sixteenth. In spite of the condemnation of the main point of this doctrine by the council of Constance, many theologians, chiefly belonging to the order of Dominicans, supported it. At a later period, also, distinguished Protestants upheld the doctrine, as Milton, Buchanan,

Bodin, Beza, Du Moulin, and others. The Jesuits took part in this as in all theological questions, but not, as has been said, in order to develope this obnoxious doctrine, but rather to put it down by argument, or to make it as little obnoxious as possible. The learned Jesuit, Salmeron, Loyola's companion, says explicitly, nobody is authorized to kill a prince, even if the latter has obtained possession of the government by violence, particularly if he is once in quiet possession of power. Salmeron, indeed, in another passage, teaches that, if an illegitimate ruler attacks a city, and is just on the point of getting possession of it by arms, in such case, he may be lawfully killed by a private person, having received a commission to such effect from the legal authority. Here Salmeron indeed wrote in the spirit of his time; but it was no small step to confine within such narrow limits the authorized destruction of a tyrant, whilst the principle had been laid down, with very little qualification, by many Catholics and Protestants of distinction. In the same sense other Jesuits have written, of whom some declared themselves still more distinctly against the doctrine: thus, for instance, the Jesuits Molina and Lessius said, "A regent, be he even a tyrant, is, nevertheless, the legal sovereign: hence the Holy Scriptures commanded obedience, even to heathen princes, in every thing which is not against the ordinances of God, even if they were the greatest tyrants, persecuted the church, and strove to force Christians to give up their faith. Hence it follows, that the murder of a regent is in no case permitted." Of all the Jesuits, about 12 in the whole, who occupied themselves with this question, only Mariana, in his book *De Rege et Regis Institutione*, upheld the doctrine authorizing the killing of tyrants, and even he with some restrictions. But hardly had Mariana's book appeared, when several Jesuits, particularly Bellarmin, completely refuted his doctrine *de tyrannicidio*, and Aquaviva, the general of the order, after some years, condemned this doctrine, and prohibited all the members of the society from touching the question any more, either directly or indirectly. From this time, this subject has been banished from their schools and their works. Hence Voltaire, when he was believed to make common cause with the enemies of the Jesuits in the accusation of their defence of tyrannicide, says, "Posterity would unanimously exculpate the order, if I were to accuse them of a crime, of which every man of

sense, nay, all Europe, and even Damiens, have acquitted them long ago." Another and equally unjust reproach against the Jesuits is, that their system of morals was lax, that they adhered to *probabilism*. Probabilism was, even 100 years before the foundation of the order, the common doctrine of all bishops, the most distinguished universities, and all the regular clergy. Under certain restrictions, this doctrine is far from being injurious to pure morality. The substance of it is, that, where a law is not pronounced clearly, it is permitted to follow that opinion which, being likewise supported by good reasons, favors the natural liberty of man rather than the severity of the law. Next arose the question, whether it was permitted to follow the probable meaning, in preference to the more probable. The probabilists answered in the affirmative. This was asserted by many theologians, particularly Dominicans, long before the origin of the society of Jesus. But, as this doctrine is susceptible of an application really dangerous to morality, the Jesuits had the undeniable merit of having been the first who wrote against probabilism. The writings of the Jesuits Robello, Molién, Gisbert, Aquaviva, Gonzalez, Damel, and others, contain unqualified attacks on probabilism, and attempts to reduce it within reasonable limits. The Jansenists, who were ready to make any charges against the Jesuits, first attacked them on the ground of their upholding probabilism. Pascal and Nicol were the first assailants: the former wished to make the Jesuits ridiculous, the latter, to make them odious. Perault and Arnaud joined them at a later period. But all these publications were declared by the parliaments of Paris and Bourdeaux, who were by no means generally in favor of the Jesuits, "calumnious writings, filled with injustice, deceit, falsifications and ignorance." If Pascal's *Lettres Provinciales* are regarded as an authority against the Jesuits, we should at least consider what Voltaire says: "It is clear that this work (the *Lettres Provinciales*) rests upon a premise totally erroneous, attributing the insane opinions of some Spanish and Flemish Jesuits to the whole order. In the casuistry of the Dominicans and Franciscans, many absurd things might also be found. But the Jesuits alone were to be held up to general derision. The same letters even attempt to prove that it is the plan of the Jesuits to make men worse, instead of correcting them; but such a plan is so senseless, that no sect in the world ever had or

could have it." The private lives of the Jesuits were exemplary. The purity of their morals is evident from the disgust which all Europe felt when a thing unheard of happened, when a Jesuit—one of a hundred thousand who composed the order—Girard by name, was accused of rape. There has never existed a society where such deviations from virtue have been rarer, even if we allow the *Amores Marelli*, published by Von Long, to be true. The least suspected witness of the Jesuits is probably Voltaire: he says—"What have I seen during the seven years that I lived with the Jesuits? A very active life, connected with many labors, and, at the same time, very frugal and orderly. All their hours were appropriated to their school labors, and to the exercises which their severe order bound them to perform. I call thousands and thousands to witness, who, like myself, have been educated by them. I dare to affirm, that nothing more repulsive and dishonorable to human nature can be found, than that there are men who reproach such people with laxity of morals." The history of the persecutions of the Jesuits, in the different parts of Europe, is very interesting. The first took place in France. In 1540, they appeared in France. The parliament hated them as friends of the Roman see, the university as dangerous rivals. The hall of the parliament incessantly resounded with the complaints of the university of Paris, who could not bear to see their students departing and putting themselves under the instruction of the Jesuits: still more painful was the loss of so many emoluments, which, under the name *Landit*, were derived from the students, while the Jesuits instructed gratis; and when, at length, the great fame of the Jesuit Maldorat, whose lecture-room was filled two or three hours before the time of the lecture, and who was at last obliged to lecture in open air, spread farther and farther, the rage of the university rose to the highest degree. The rector of the university therefore intimated to them that they must close their schools. They obeyed; but an uproar took place among the students, and the court ordered the Jesuits to open their schools again immediately, and not to regard the arrogant pretensions of the university. Afterwards, however, when public business kept the king and his ministers for a long time from Paris, the university accused the Jesuits before the parliament. Pasquier, Arnaud and Dollou, the advocates of the university, loaded the Jesuits with

calumnies. Their advocate, Versaris, defended them so powerfully, that even the parliament, hostile as it was to the Jesuits, acquitted them. When, at a later period, Henry IV besieged Paris, the Jesuits attracted new odium, by asserting, when interrogated by the citizens, in opposition to the opinion of the other theologians, that excommunication was not the necessary consequence of opening the gates to a heretic king. All the old hatred broke forth anew when Châtel attempted to murder Henry IV. The Jesuits were calumniously charged with being the authors of the attempt, and the parliament tumultuously and unjustly condemned to death the Jesuit Guignard. The judges themselves confessed, some years later, that they had acted over-hastily, and all France acknowledged the innocence of the Jesuits. In the first heat, the Jesuits were banished from the realm by a decree of the parliament; but some parliaments in the provinces openly refused to register the ordinance of the parliament of Paris, and those particularly which were independent upon that of the capital, declared the act illegal, hurried and unjust, and in general protected the Jesuits. For nine years, the Jesuits remained unmolested in Bourdeaux and Toulouse. Students from all France repaired to them, and the king was so much petitioned to restore so useful an order, that he recalled them. The parliament refused to register the royal decree, and sent a deputation to Henry, at the head of whom was the president Harley, who, as the historian Duplex says, uttered a uniform strain of abuse against the Jesuits. The king answered with a speech extempore, which, as De Thou has not recorded it in his History of France, is hardly known, and we think it proper to give it here, to show how this able monarch spoke extempore: "Your care for my person and the welfare of my empire I acknowledge with pleasure. What you have just told me I have known long since; but my ideas on it were unknown to you. You speak of difficulties, which appear to you great; but I must tell you that I have weighed them duly seven or eight years ago. The best resolutions originate from the lessons of the past, and these I know better than any body else. You imagine that you understand affairs of government, and that you may interfere with them, which seems to me much as if I should interfere with your duties by making a report in a civil process. I therefore must tell you, first, in regard to the affair of Poissy, that, if

all had behaved as one or two Jesuits who happened to be present, every thing would have turned out better for the Catholics. Not their ambition, but their modesty, from that time, has appeared conspicuous; and I cannot conceive how you can accuse those of ambition, who refuse, constantly and unconditionally, abbeys, honorary offices and dignities; nay, who oblige themselves by vows never to strive for them, and whose life, in general, has no other purpose than to be useful to all people. Is it the name *Jesuit* which excites your zeal? then you must also dispute with those who have taken their name from the holy Trinity (*les pères de la Trinité*); and, if you believe that you belong as much to the society of Jesus as the Jesuits, you may ask yourselves whether your daughters belong as much to the *Filles-Dieu* in Paris as the nuns who bear this name, and you may as well call yourselves knights of the order of the Holy Ghost as myself and the other knights of the order. I, for my part, should like as well, or rather better, to be called *Jesuit* than *Jacobin* or *Augustine*. If a part of the other clergy are hostile to the order, it may originate from the circumstance that ignorance always was hostile to science. I have found that, as soon as I declared my intention to recall the Jesuits, two classes of men immediately opposed the measure, viz. the Huguenots and all the Catholic clergy notorious for bad morals and conduct; but this gave me a greater esteem and love for the Jesuits." The king speaks at length on the reason why the Sorbonne could not agree with the Jesuits, because the latter were more learned, and that they should now not only be suffered, but take root within the realm.*—In England, Jesuits never had much footing. The reformed doctrines had already become the prevalent religion of that country, when the order grew up. The Jesuits in England were only a small division of missionaries, who labored among the dispersed and oppressed Catholics, quietly and under the veil of secrecy. Several Jesuits have suffered martyrdom in England, and several laws enacted against them manifest the grossest prejudice, and have been repealed only in modern times.—In the eighteenth century, the Jesuits received their first blow in Portugal. Pombal, minister

* The speech is long, and its genuineness very suspicious, as it goes carefully through all the points for which the Jesuits had been reproached. It is too long for a king, too systematic for an extempore performance.—ED.

of king Joseph, a powerful and passionate man, wished to promote the welfare of Portugal; but his plans were those of a despotic minister of a despotic government. Every thing opposed to his wishes was to fall. Many circumstances coöperated to render him inimical to the Jesuits, to whose influence, as confessors, he owed his elevation. It would have been better for the Jesuits if they had avoided accepting confessorships at court, in the same way as they declined the dignities of the church. Pombal believed the country of the Paraguay, in which the Jesuits ruled so paternally, contained a number of gold mines, unknown to the inhabitants. He therefore obtained this country from Spain by exchange for another, 1400 miles distant, into which he wished to transplant all the Indians of Paraguay. The Jesuits received orders to prepare the people for this measure. The natives remonstrated very modestly and respectfully against such a forced emigration, representing how impossible it would be to transplant 30,000 people, with all their goods, to such a distance through the wilderness; but the government was inexorable. Only a few months were allowed them for preparation. The Indians, who were to be torn from the ground they had first cultivated, the huts where they were born, and the graves of their friends and parents, were reduced to despair. Even the Jesuits, who admonished them to obey, were now suspected by the Indians of conspiring with their heartless oppressors in Europe. The Indians armed themselves for resistance. A war broke out, in which the Indians were at first victorious, but were afterwards conquered. Many burnt their villages, and fled into the mountains, where most of them perished. After having searched in vain for gold every where, Pombal was ashamed of his bloody and bootless measure, and, under Charles III of Spain, the lands were reëxchanged, after the innocent Indians had become accustomed to all the vices of European outcasts. But, as a despotic minister cannot err, the Jesuits were now to be proved the instigators of the resistance of the Indians to Pombal's humane project of emigration. To make the world believe this, Pombal laid a plan with a certain Platel, whose vices had made him an outcast from various countries. The world was to be persuaded that the Jesuits had maintained a warlike state in Paraguay for 150 years, and even a king, Nicholas, who commanded their forces, &c. In Spain, the story was laughed at. People knew why Span-

iards had been prohibited, with the consent of government, from visiting the missions—that they might not infect with European vices the innocent Indians. This prohibition was a point on which Pombal's writer always insisted. The statements of Platel were proved to be false by the governor of Peru and the Mexican bishops, and the book was burnt in Madrid; yet Pombal's libels found belief in Europe. The Jesuits were recalled from Paraguay, and imprisoned in Portugal. There were other reasons to excite the minister's anger against the Jesuits. In a question respecting the marriage of the king's daughter, the confessor of the king, the Jesuit Moreira, gave advice contrary to that of Pombal, and the king followed the Jesuit. In the papers of the queen, who died in 1754, Pombal discovered that the Jesuits in Maranham had often apprized the queen, in consequence of her request, of the extortions, &c., of the governor of the place, the brother of Pombal. His passion rose to the highest pitch. Pombal had excited against him the proprietors of the vineyards of that country by a monopoly of port wine, from which he derived advantage himself, so that the inhabitants devastated his vineyards: the Jesuits, it was reported, had done it. When, after the dreadful earthquake of 1755, the Jesuits made use of this event to bring people to repentance, and the king even expressed the desire to devote himself for eight days to spiritual and solitary meditation, under the direction of the pious Jesuit Malagrida, this resolution of the king gave great uneasiness to Pombal, who feared for his influence. Cost what it would, the Jesuits were to fall. At the same time, another obstacle to Pombal's power was to be annihilated—the high nobility, with whom he lived in decided opposition. These two objects Pombal succeeded in accomplishing with one stroke. Sept. 4, 1758, the king, on his return from a love adventure, was wounded by assassins. Pombal persuaded the king that this attack was owing to a conspiracy of the high nobility and the Jesuits, and don Joseph was now in constant fear of new conspiracies, and therefore totally in the power of his minister. The duke of Aveiro, the whole house of Tavora, were tried by an extraordinary committee, and suffered an ignominious death. Malagrida was arrested as concerned in the conspiracy, and, after several years, was sentenced and burnt by the obedient inquisition as a heretic. When, with the death of don

Joseph, Pombal's despotism was at an end, when the latter himself, being accused and convicted of the most execrable crimes, was sentenced to death by the court unanimously, and pardoned by the queen, and only punished by banishment, then also the affair of the conspiracy was reviewed, and the parties who had suffered were declared innocent. But, if the conspiracy really had existed, nothing proved the connexion of the Jesuits with it. It is true, the Jesuit Malagrida had, shortly before that attempt, declared that, if the king, who was given to sensual pleasures, did not reform his conduct, a great disaster would follow; and other Jesuits were the friends of Tavora and Aveiro. But none but Pombal could have made this circumstance the ground of an accusation against the society. He accused the whole body before the pope, and demanded its abolition. When the pope ordered the trial of the accused, Pombal, without waiting, exiled the Jesuits, sent back the papal nuncio, and broke off all connexion with Rome. 1840 Jesuits were transported, in 1759, to Italy, and suffered the worst treatment. In France, also, the order declined. Madame Pompadour and the minister Choiseul were hostile to it. When the former had appeared at court, without any other claim than because she had become the king's mistress, the scandalous event excited general attention. As most people are more ready to violate the dictates of morality than conventional forms, madame Pompadour resolved to procure a legal title to appear at court, and adopted the idea of becoming *dame du palais* of the queen. But for this the approval of the good-natured queen was requisite, and it was concluded to deceive her by an appearance of repentance, and to make her believe madame Pompadour had ceased to be the king's mistress. A confessor was necessary, and the choice fell upon the Jesuit De Sacy, a man apparently simple, who, it was supposed, would not penetrate the plan. But Sacy declared that, if it was really her earnest intention to return to virtue and religion, she must, without delay, leave the court, retire into solitude, and try to repair the evil she had done, by real repentance: until then he could not take upon him the direction of her conscience, and he never would profane the sacraments and let himself be made a tool of in such an intrigue. This opposition awakened in madame Pompadour inveterate hatred against the order. Choiseul belonged to the philosophers, so called, who were opposed

to all positive religion; and the Jesuits were greatly in his way, also, on account of his hatred against the dauphin, who loved the society. An opportunity was soon found to attack them. The Jesuit Lavalette, in Martinique, had been engaged in commerce; his vessels were taken by English privateers, and his bills of exchange were not paid; in consequence of which, the whole order, which certainly was not obliged to answer for Lavalette's illegal conduct, were called before the parliament, which nourished the old hatred against the society, and now counted, moreover, several Jansenists among its members. The order was condemned. The process was the signal for a general attack upon the Jesuits. Choiseul had several books written against them, and the order abolished by the parliament without a hearing, though the bishops of all France declared in its favor. The process of the parliament was a mere farce. The total abolition took place in 1767. Meanwhile Charles III ascended the throne of Spain, and assured the general of the order of his protection. But the minister Aranda, an intimate friend of Choiseul, praised by Condorcet, as a decided enemy of priests, nobles and kings, was an enemy of the Jesuits, as was also his friend Campomanes, fiscal of Castile. They procured the exile of the Jesuits in a way that did them little honor. One evening, the rector of the Jesuit college at Madrid was apprized that a stranger wished to see him immediately. The stranger coming, as he said, from the Jesuit rector of Seville, gave to the rector of Madrid a parcel of papers, with the request that he would read them attentively, and make his remarks on them. The rector ordered the papers to be carried to his room, and, as the hour of meeting in the refectory had begun, went thither in order not to interrupt the prescribed order. Hardly had he arrived there, when the house bell was rung violently. Royal commissioners enter, and seal up all papers, including the packet just left, and carry them to Aranda. Not long after, in the night of April 1, 1767, all the Jesuit colleges in the kingdom were surrounded by soldiers at the same hour, and the Jesuits carried to the states of the pope. April 2, 1767, the king declared that he had resolved to keep the true cause of the banishment of the Jesuits secret. Pope Pius VI, some years before his elevation, first found the traces of this infamous intrigue. When a cardinal, he had been appointed by Clement XIV a member of the committee who were to inves-

tigate the affairs of the Jesuits. The Spanish government, to justify itself somewhat with the pope, had sent the alleged proofs against the Jesuits to Rome. Among these were letters purporting to have passed between distinguished Jesuits, containing remarks of the most infamous character; among other things, it was said in them, that the king was an illegitimate son of cardinal Alberoni, and hence not entitled to the throne, &c. Of course, these letters must have excited the king, and prompted him to banish the order. But it was also found, by a comparison of the hand-writings, that these letters were forged. It was now evident who had brought the parcel only a few moments before the seizure of the papers in the Jesuit college in Madrid. The exile of the Jesuits, and several other circumstances, had caused a dispute between the pope Clement XIII and Portugal and Spain. The pope (Rezzonico) died, without an adjustment of the dispute having taken place. The election of his successor was now a matter of the highest importance. The question was, whether the Jesuit party should prevail or not. Cardinal Ganganelli had already, under Clement XIII, expressed his opinion, that it was more advisable to sacrifice the Jesuits, though innocent, than to live in constant dispute with the kings. The Bourbon party therefore supported him at the election. At the same time, in the conclave, he gained the friends of the Jesuits by maintaining that the new pope ought not to think any more of the abolition of the order than of pulling down St. Peter's; and he was elected. The new pope, in fact, after his accession, said, in his missives to the courts of Versailles, Madrid and Naples, that he neither could blame nor abolish an order which 19 of his predecessors had solemnly confirmed; it could be the less expected of him, as the same had been confirmed by an œcumenical council at Trent, whose decrees, according to the principles of the Gallican church, were binding on the pope; but he would, if asked, call another council, in which the Jesuits should be heard, all questions investigated anew and decided upon; that he was obliged to protect the Jesuits equally with the other orders; that, moreover, all the princes of Germany and the king of Sardinia had written to him in favor of the Jesuits, and he therefore could not yield to the wish of some cabinets, which desired the abolition of the order, without drawing upon himself the displeasure of so many other monarchs.

But the papal letter was of little avail. The courts threatened the pope with the publication of his letters, written before he had acquired the pontificate, in which he promised to the courts the abolition of the Jesuits, if they would lend him their support in the election. The abolition was difficult, as Clement XIII, with the assent of the whole college of cardinals, had, a short time before, solemnly confirmed the order by the bull *Apostolicum*, and the immediate contravention of the bull would have been an unparalleled scandal, to which the cardinals never would have given their consent. There was no way left, therefore, but to choose the form of a brief—a decree which the popes issue without consulting with the college of the cardinals. In 1773, the brief was issued. The reasons for the abolition were not given in the brief; it was only said that the popes had abolished several other orders, and that the council of Trent had not exactly pronounced a confirmation of the order. Four weeks after this violation of justice, Ganganelli appointed a committee to investigate the accusations against the Jesuits! The Protestant historian John Müller says of this abolition—"It was soon apparent to wise men, that a common bulwark of all authorities had fallen." Prussia did not acknowledge the abolition, but retained the Jesuits, as useful instructors, in Silesia, until at last they themselves, from obedience to the pope, urged the king to complete their abolition. In Russia, also, the order remained, because Catharine was convinced of its utility; and the government obtained the necessary permission from the popes Pius VI and VII. Clement XIV died in 1774. His sickness and death were accompanied by strange symptoms, and calumny immediately accused the Jesuits of having procured his death. The persons in attendance on the pope, and the physicians, gave, however, no satisfactory statements; and Le Bret, in his Magazine of Political and Ecclesiastical History, so clearly showed the innocence of the Jesuits, that this calumny never could gain footing. (See *Clement XIV.*) The abolition of the Jesuits had serious consequences. In most Catholic countries, it produced a chasm in the means of public instruction, which it was not easy to fill. The education of youth lost, in many cases, the salutary religious direction which distinguished so much the instruction of the Jesuits. Neither the archives nor the coffers of the Jesuits satisfied expectation. Some persons believed the money to have been car-

ried off; but nothing has been heard of it for 50 years. The order was reinstated in White Russia in 1801, and in Sicily in 1804, and was put entirely on its old footing in 1814, by the pope. Whether it ought to be restored every where, is a question which, we think, is different from what it was formerly. In the southern countries of Europe, it appears capable of becoming very useful. Of its reestablishment in Germany, there is little hope. There is such a mass of knowledge distributed in the German nation, its public instruction is so thorough, and the establishments for education so well founded, that the Jesuit schools appear, at least, not to be needed. In this nation, too, materialism does not remain to be conquered, but the sound sense of the people soon led it back to religion. Besides, the society's plan of education would little agree with that of the Germans, because that of the Jesuits is by its nature a general, and therefore a stable one, and cannot adapt itself to modern systems of education.*

JESUITS DE ROBE; secular persons of high rank—as, for instance, Louis XIV of France—who are bound to the order by vows of obedience, but have not taken the spiritual vow.

JESUS, called also *Christ* (*Χριστος*, the Anointed), the Son of God, the Savior of men, whose birth, life and death were predicted by prophets, and attended with miraculous manifestations of divine power, was born of the virgin Mary, of the tribe of Judah, who was betrothed to Joseph, an obscure artisan. The place of his birth was Bethlehem: the time is uncertain, but is commonly considered to

have been in the 12th year of the consulate of Augustus, four or five years before the beginning of the vulgar era. Our information concerning him is derived almost entirely from detached sketches of his life, written by four of his followers. The angel Gabriel had announced to Mary, that the power of the Highest should overshadow her, and that she should bear a son who should rule over the house of Jacob forever; and on the night of his birth, an angel appeared to some shepherds and announced the coming of a Savior. On the 8th day, he was circumcised according to the law of Moses, and, on the 40th, was presented in the temple, where the aged Simeon pronounced him to be the light of nations and the glory of Israel. The coming of the divine infant was also hailed by the adoration of the Magi, who were miraculously directed to the house where the young child was. Herod, alarmed by these indications, determined to destroy all the male children of Bethlehem and its vicinity, of the age of less than two years, for the purpose of effecting the death of Jesus. But Joseph, being miraculously warned of the danger, fled to Egypt with the virgin and her child, and, on his return after the death of Herod, went to reside at Nazareth, in Galilee, whence Jesus is called a *Nazarene*. We have no further accounts of the earlier years of Jesus, except the remarkable scene in the temple, when he was 12 years old, and the general observation of Luke, that he remained in Nazareth with his parents, and served them. At the age of about 30 (*Luke* iii, 23), he was baptized by John in the river Jordan; the spirit of God descending upon him like a dove, and a voice from heaven proclaiming, "This is my beloved son." Previously, however, to entering upon his heavenly office of divine teacher, he retired to a solitary place, where he passed 40 days in fasting, meditation and prayer. His mission is generally considered to have occupied three years, spent in acts of mercy, in inculcating a purer system of morals, more exalted notions of God, and more elevating views of man and his destiny, than had yet been presented to the world. If, when we consider his miracles, he appears like a God, we must also acknowledge something superhuman and divine in his purity of life, his warm love for others, and his self-devotion to their welfare; his meek yet firm and unshrinking endurance of insult, contempt, calumny and suffering. While he denounces sin, and prophesies the coming

* The length of the articles on the Jesuits may be excused from the interesting nature of the subject. Any view, however, of the subject, which could be given in a work of the character of the present must be too concise to enable the reader to form satisfactory conclusions; to do which, great knowledge of facts and critical acumen are requisite. The articles can only serve to indicate the most important points to be investigated. The second article was given to show what construction Jesuits themselves put upon the important charges against them. We may close with remarking, that every thing in history has its time, and the order of the Jesuits can never rise to any great eminence in an age in which knowledge is so rapidly spreading. It is connected with the old order of things, not with the new, and has twice returned with servilism into Spain, and once into France. The *Encyclopédie Moderne*, in its article on the Jesuits, calls them the *pretorian guards*, the *strelitzes*, the *janisaries* of the pope; and it can hardly be supposed that the guards will flourish when the sovereign is daily declining in splendor and power.

desolation of the corrupt city, he forgives the sinner, and weeps over the fate of the obdurate Jerusalem. Nothing can surpass the perfect beauty of his life, but the god-like sublimity of his death. It is unnecessary here to trace the particulars of his short but eventful mission. He had chosen 12 apostles to be the companions of his ministry, the witnesses of his miracles, and the depositories of his doctrine, and he was betrayed into the power of his enemies by one of these, with the mockery of a friendly salutation. Betrayed by one, denied by another, and abandoned by all, he was carried before the Jewish priests, found guilty, and by them delivered over to the Roman magistrates, who alone had the power of life and death. Condemned to death as a disturber of the public peace, he was nailed to the cross on mount Calvary; and it was in the agonies of this bitter death, that he prayed for the forgiveness of his executioners, and, with a touching act of filial love, commended his mother to his favorite disciple. The evangelists relate that, from the hour of noon, the sun was darkened, and, three hours after, Jesus, having cried out, "It is finished," gave up the ghost. The veil of the temple, they add, was torn asunder, the earth shook, rocks were rent, and the tombs opened. The centurion who was present, directing the execution, exclaimed, "Truly this was the son of God." The body of Jesus was taken down by Joseph of Arimathea, and placed in a tomb, about which the Jewish priests, remembering his prophecy that he should rise on the third day, set a guard, sealing up the door. Notwithstanding these precautions, his prophecy was fulfilled, by his resurrection on the first day of the week (Sunday); and he appeared repeatedly to his disciples, to encourage, console and instruct them. On the 40th day after his resurrection, while with them on the mount of Olives, he "was taken up," and disappeared out of their sight.

JESUS SIRACH. (See *Sirach*.)

JET. The color of jet is a pure and deep black, sometimes with a tinge of brown. It occurs in opaque, compact masses, so solid and hard that they are susceptible of being turned on a lathe and highly polished. Its fracture is conchoidal or undulated, shining or even splendid, and it has a resinous lustre; its specific gravity, from 1.25 to 1.30. By friction, it acquires a weak electricity, even when not insulated. It sometimes presents the form of branches of trees, and exhibits traces of a ligneous texture. It burns with flame often a

little greenish, but it does not melt, like solid bitumen. It exhales, while burning, a strong and sometimes aromatic odor, sensibly different from that of coal or bitumen. It most frequently occurs in detached masses of a moderate size, in beds of sandstone, marl, limestone and secondary trap. It is also connected with formations of coal, particularly that which is associated with secondary trap rocks. It is also found with other varieties of lignite. Good specimens of jet are found in Galicia and other places in Spain; near Wittemberg, in Saxony; in the department of Aude, in France, where it sometimes contains amber. In England, it occurs near Whitby. In the Faroe islands, and in the isle of Sky, it occurs in trap rocks. In the U. States, in Massachusetts, it is found at South Hadley, in the coal formation. Jet is sometimes employed for fuel, but is more frequently cut and polished, for ornamental purposes, buttons, bracelets, snuff-boxes, &c. Some mineralogists consider it intermediate between coal and bituminous wood.

JEUX FLORAUX (*floral games*); a festival annually celebrated in Toulouse. As early as the time of the Troubadours, Toulouse had a literary institution, called the *collège du gai savoir*, or *de la gai science*, as poetry was then termed. It was founded before the year 1323. Seven Troubadours and a chancellor formed the college; they conferred the degrees of doctor and bachelor, and taught in their palace and gardens the *lois d'amour* or *fleurs du gai savoir* (laws of love, or flowers of the gay science). In 1323, they sent a letter, in verse, to all the poets of the Langue d'Oc, inviting them on the 3d of May, 1324, to a poetic festival, where the composer of the best poem was to receive a violet of fine gold. The celebrated Troubadour Arnaud Vidal won the prize. The *capitouls* (magistrates) of the city, who had likewise been invited, to encourage a festival so much to the honor of Toulouse, offered, in future, to furnish the golden violet. To increase the splendor of the annual celebration, two other prizes were added to the violet—an eglantine and a pansy, both of silver. Similar institutions afterwards arose at Barcelona, in the reign of king John, and at Tortosa, in the reign of king Martin. The original institution at Toulouse, on the other hand, began to decline, and, at the end of a century, was nearly extinct, when it was revived by Clemence Isaure. (See *Clemence Isaure*.) She left by will a considerable sum for the celebration of this po-

etic festival, which was now continued under the name of *jeux floraux*. Mass, a sermon, and alms-giving, commenced the ceremonies. Before the awarding of prizes, the tomb of Clemence was strewed with roses. More costly flowers rewarded the zeal of the competitors. Four prizes were offered—an amaranthus of gold, of the value of 400 livres, for the best ode; a violet of silver, value 250 livres, for an essay in prose, which was of not less than a quarter nor more than a half hour in reading; a silver pansy, value 200 livres, for an eclogue, *elégy* or idyl; and a silver lily, value 60 livres, for the best sonnet, or hymn, in honor of the holy virgin. Instead of doctors, there were now a master of the games, and 40 judges (*mainteneurs*). In 1694, the college was formally erected into an academy. The office of chancellor, and other distinctions of rank, were abolished in 1773. The seal is kept by a standing secretary, and one of the members presides, with the title of *modérateur*, who is appointed by lot every three months. After an interruption of 15 years, from 1790 to 1806, the *mainteneurs* assembled again in Toulouse, the academy went into operation, and, according to the old custom, awarded the prizes founded by Clemence Isaure. Since then, this festival, associated with so many poetic recollections, has been annually celebrated. The academy assembles in the council-house of Toulouse, which is called the *capitolium*.

JEW, THE WANDERING, OF ETERNAL; a poetical personage of popular traditions, who owes his existence to a story connected with the well-known scene in the history of Christ's passion. As the Savior was on the way to the place of execution, overcome with the weight of the cross, he wished to rest on a stone before the house of a Jew, whom the story calls Ahasuerus, who drove him away with curses. Jesus calmly replied—"Thou shalt wander on the earth till I return." The astonished Jew did not come to himself till the crowd had passed, and the streets were empty. Driven by fear and remorse, he has since wandered, according to the command of the Lord, from place to place, and has never yet been able to find a grave. This punishment of unbelief and hardness of heart—a condemnation to wander forever on the earth, and to be the contemporary of all centuries—has afforded materials for the Christian poets. Schubart and Schlegel have turned this legend to account. Göthe (in the third volume of his own

Life) has sketched Ahasuerus, with great spirit and humor, as a philosophic cobbler at Jerusalem, who opposes the Savior with a cold, worldly logic, which will not look above the things of earth, and is therefore condemned to remain in this world (which is all to him) until a desire for higher things should awaken in him.

JEWS. After the Babylonish captivity, the Hebrews (see *Hebrews*) were called *Jews*, the greater part of the nation having remained in the middle and eastern provinces of the Persian empire, and only 42,360 men, with their families, principally of the tribes of the kingdom of Judah, having returned to their country, when permission was granted by Cyrus (536 B. C.) They founded a new kingdom in Judæa, dependent on Persia, but under the domestic direction of high priests and elders, according to the Mosaic constitution. Jerusalem, the temple, and the Levitical cities of the country were rebuilt, not without difficulty; the writings of Moses, the historical and prophetic books collected; the great synagogue of 120 learned men established for the critical revision and explanation of the Holy Scriptures, as well as separate synagogues and schools for the expounding of the law, and the instruction of the people. All these institutions did not enable Ezra and Nehemiah, the restorers of their nation, to revive the primitive Mosaic constitution. The spirit of his code belonged to another age, and to other circumstances. The later Jews could retain only the letter of the law, and, in their expositions, lost themselves in the subtleties which they had learned from the Chaldæans. In enterprise and activity, however, they surpassed their fathers. Their commerce, and their annual pilgrimages to the temple, to which each Jew was obliged to make an offering, accumulated at Jerusalem, under the mild government of the Persians, more treasures than Solomon's age had ever seen. They were not therefore destitute of the means for conciliating the Macedonian conquerors, and although, on the fall of the Persian monarchy, they submitted to Alexander the Great, and were involved in the wars of his generals for the supremacy, yet their fate was not hard. Ptolemy, king of Egypt, who took possession of Palestine 320 B. C., allowed them the enjoyment of their singular customs, and granted the colonies which he transplanted to his capital (Alexandria), for the purpose of extending its commerce,

peculiar privileges over the natives. The Jews were far from improving their condition by engaging in the war between the Syrian and Egyptian kings, on the side of the former (197 B. C.); for the Syrian Seleucidæ considered their possessions as lawful subjects of plunder. Seleucus IV attempted to plunder their temple, and Antiochus IV, in order to reduce them to a uniformity with the rest of his subjects, determined to destroy their religion. His pretext for this was the shameful spectacle of intrigue and corruption displayed at the Syrian court, in the rivalry of the priests and nobles for the dignity of high-priest; but the nation adhered, with its characteristic obstinacy, to the forms of the Mosaic worship. When, therefore, Antiochus set up the Olympian Jupiter for worship in the temple, and compelled the Jews to sacrifice and eat swine, many suffered the most terrible death, rather than transgress the law of Moses. In vain were Jerusalem and the surrounding country laid desolate. These persecutions only served to develop a national spirit, which broke out in the insurrection of the Maccabees. Judas, surnamed *Maccabeus* (the hammer), was the third son of a priest, who had fled, with his family, from persecution, and had collected, in the mountains of Judæa, a band of faithful believers. With their assistance, he defeated the Syrians, took Jerusalem, and restored the Mosaic worship (165 B. C.). A new epoch of glory and renown for the Jews begins under the government of the Maccabees. Three brothers of this family of heroes—Judas, Jonathan and Simon—bore successively the dignity of high-priest, and completed their deliverance from the Syrian yoke. Simon, whom the gratitude of the nation had created a prince, left to his son, John Hyrcanus (135 B. C.), an independent kingdom, secured by an alliance with the Romans. The latter extended it by his victories over the Idumæans and Samaritans, and confirmed it by the establishment of the high council, or sanhedrim. The reign of Hyrcanus was distinguished for the progress of civilization and the increasing prosperity of the nation. In his time also arose the sects of Pharisees, Sadducees and Essenes. (q. v.) His son, Judas Aristobulus, received the royal dignity (105 B. C.), and the Jewish state appeared to be in the way to recover the power and splendor of David's time, since Alexander Jannæus, the successor of Aristobulus, took Gaza, in a successful war against Egypt;

but the above-mentioned sects gave rise to civil dissensions. After the death of queen Salome (70 B. C.), who was ruled by the Pharisees, the succession was disputed by her sons Hyrcanus and Aristobulus. The war between the brothers introduced foreign umpires into the country. Pompey conquered Judæa (63 B. C.), according to the Roman policy, for the weak Hyrcanus. This result of the contest put an end to the new freedom of the Jews. Jerusalem lost its walls, the kingdom its new conquests, the nation its independence, and the family of the Asmoneans (the *illustrious*, a title borne by the Maccabees) its royal dignity. Hyrcanus was made high-priest and ethnarch, and each Jew became a tributary to the Romans. It was in vain that the sons of Aristobulus endeavored, by repeated insurrections, to restore the former state of things. The Roman power kept the people in chains, and a false friend (Antipater of Idumæa) introduced himself, as a Roman procurator, into the family of Hyrcanus, to effect its ruin. While the Asmoneans were struggling for independence, Herod, Antipater's son, was securing the kingdom for himself at Rome. Antigonus, son of Aristobulus II, who had maintained himself five years in Jerusalem, by the assistance of the Parthians, was expelled by the new king Herod (q. v.) 35 B. C., and the last of the Asmoneans was put to death. The reign of this foreign king, who acquired the name of the *Great* by maintaining himself amidst many difficulties, was of no advantage to the country. The doubtful character of his faith made the chief men, who were dependent on him, indifferent to their ancient religion, and the murders which he committed in his own family, as well as the unceasing oppression of the Romans, filled the people with general discontent. The divine worship constantly degenerated more and more into empty forms, and the licentiousness of the court contaminated all ranks of the nation. Such was the situation of the Jews and of Judaism when Christ was born. Herod survived this great event to stain his last days by the murder of the children of Bethlehem; but neither he and his successors, nor the counsels of the Pharisees, could avert the fate of the Jews. Under the feeble princes who succeeded Herod, the country soon came to be treated merely as a Roman province. Oppressed by the procurators, precluded from the exercise of their religion, the infuriated people broke out into a rebellion (A. D. 66), which ter-

minated in the total destruction of the Jewish state. September 7, A. D. 70, Titus took Jerusalem by assault, burned the temple, demolished the city, and sold into slavery, or drove into exile, all the inhabitants who escaped death. About 110,000 Jews perished during the siege and at the destruction of Jerusalem. There was no suffering which this unhappy people did not undergo. Those Jews who had taken refuge in the mountains and the ruins, were compelled, after many unsuccessful efforts, to abandon their country, now changed into a barren desert. The remnants of the nation, scattered over all the earth, still possessed advantages which could belong to no other people in similar unhappy circumstances. Their natural ingenuity and industry, the strength of their religious zeal, the literary treasures of their holy writings, secured to them every where admittance and success, and preserved their national character. They found proselytes and old believers in all countries of the Roman empire, and in the East, as far as the Ganges, where those who had settled, during the Babylonish captivity, had greatly multiplied. Egypt, and all the northern coast of Africa, were filled with Jewish colonies, and in the cities of Asia Minor, of Greece and Italy, were thousands enjoying the rights of citizens. Thus, by their mutual connexions, and by their holy books, they became the involuntary instruments of the propagation of Christianity, which but few of their own number embraced. They were not required to receive it by the Roman emperors. Under the emperor Julian, they ventured to make preparations for a new temple in Jerusalem, which had been rebuilt by Adrian, under the name of *Ælia Capitolina*. Although this attempt failed, they derived great advantages from their sanhedrim, revived at Tiberias, and their patriarchates (presidencies of the sanhedrim), which were established—one at Tiberias, for the Western Jews (429), the other for the Jews beyond the Euphrates, first at Mahalia, afterwards at Bagdad. The former was hereditary, the latter elective by the sanhedrim at Bagdad. The incumbent of the latter, which subsisted till 1038, was called *achmalotarch* (prince of the captivity). These two patriarchates became points of union, and their flourishing academies in the East served as seminaries for their learned rabbins. One of the works of these scholars was the collection of the traditionary expositions of the Old Testament, and additions

to it, which was begun, A. D. 200, by rabbi Juda the Holy (Hakkadosh), completed A. D. 500, and received, under the name of the *Talmud*, as a rule of faith, by the scattered communities of Jews. It requires that wherever 12 adults reside together in one place, they shall erect a synagogue; and, since the destruction of the temple had put an end to sacrifices, they are to serve the God of their fathers by a multitude of prayers, and little formalities, amidst the daily occupations of life. This book of law allows usury, treats agriculture and grazing with contempt, requires the strictest separation from other people, commits the government to the rabbins, as the teachers and nobles, and inculcates a corrupt moral system, which has degraded the character of the great mass of this unfortunate people, rendered them dangerous to those among whom they live, and obstructed their naturalization, even where they enjoy the greatest privileges. This applies to the Rabbinites (that is, the followers of the Talmud), to which sect nearly all the European Jews belong. The sect of the Caraites, who reject the Talmud, and hold to the law of Moses only, are less numerous, and are found chiefly in the East, in Turkey and Eastern Russia. During the decline of civilization in Europe, where the Jews had settled as colonists, even under the Romans, and had penetrated as far as Gaul and Germany, owing to the slave-trade, they preserved a certain degree of civilization by means of their schools, which, during the confusion consequent on the destruction of the old, and the formation of new states, by the irruption of the barbarians, not only preserved their existence, but obtained them influence and authority. They made themselves masters of the commerce of the old world, and, as money-lenders and brokers, were often of great importance to princes and nobles; and, during the dreadful persecutions which they underwent from the cruelty of the Christians, even after the seventh century, they still continued prosperous in those countries, even during the periods in which they suffered most. Their own usury, and the rapacity of the Christians, rather than religious hatred, were the true causes of these persecutions. The most dreadful crimes, and all public calamities, were attributed to them by the Christians, as a pretext for ridding themselves of troublesome creditors, or for obtaining possession of their treasures, either by their execution or banishment; but

their wealth and adroitness had rendered them so important, that they were always able, eventually, to secure the protection of spiritual and temporal rulers. They lived more happily among the Moham-medans, although they were distinguished by dishonorable badges, and oppressed by heavy taxes; and, during the Moorish supremacy in Spain, their prosperity was increasing, and their learning flourishing. (See *Rabbinical Language and Literature*.) In the cities of France, Germany and Italy, after the eleventh century, particular streets, and enclosed places, were assigned to them, in consequence of which, in the persecutions during the crusades, thousands often fell victims at once to the popular fury. Decrees of councils, and the ordinances of secular rulers, repeatedly declared the Jews incapable of enjoying the civil rights of Christians, and of holding public offices. They could no where be domiciliated, nor attached to any guild or corporation; but, in consideration of the payment of certain sums of money, they enjoyed the immediate protection of the sovereign, who, in his financial embarrassments, obliged them to make repeated contributions. In Germany, they paid a considerable tax, in return for which they were protected, as the money agents (*Kammerknechte*) of the holy Roman empire, as they are denominated in an imperial letter of protection. Their conversion to Christianity could not be effected by such treatment. In Spain and Portugal, indeed, at the end of the fifteenth century, they yielded to force, and suffered themselves to be baptized *en masse*; but, as soon as the storm was over, they were seen again in the synagogues. The superstition of the fifteenth century, whose worship of saints and relics must have appeared to them idolatry, might well persuade them that their own pure monotheism was more rational and scriptural. From this circumstance, and from their pride in the antiquity of their nation and constitution, we may infer how many of those who publicly professed to be converts to Christianity, and were called, in Portugal, *new Christians*, and who might attain to a noble rank, and even to high church dignities, were still, in private, Jews, continuing scrupulously to observe the Mosaic ceremonies.* The Portuguese Jews, on

account of their connexion with these secret adherents to Judaism, have been particularly respectable, and are in possession of large landed estates. The Dutch Jews, chiefly fugitives from Portugal, were once distinguished for their immense wealth. The Polish (who, since 1264, have been in possession of important privileges, and have been a great hindrance to the industry of the cities) and the Russian (now the most numerous) have possessed themselves of nearly all the commerce; also of the inns, the beer and brandy shops, and, in some places, of the post-offices. The German Jews, on account of the increase of the commercial cities and corporations, have kept only the gleanings of the retail trade. In all places, the Jews have a peculiar character. Their confinement to employments which depend principally on ingenuity and cunning, has had a debasing effect on the great body of them. In modern times, however, distinguished scholars, philosophers, artists, physicians and merchants have been found among them; as Spinoza, Moses Mendelssohn, David Friedländer, Moses Kuh, &c. The philosophical spirit of the last half of the 18th century first began to acknowledge the rights of the Jews. Plans for the improvement of their political and moral condition were discussed, and afterwards, by the benevolence of some governments, carried into execution, but with little, and often with no success. The only consequence of the great sanhedrim, to which the emperor Napoleon summoned 100 rich Jews (1806), was an imperial decree, soon after, declaring those Jews only to be French citizens who were occupied in some useful employment; but they were still drawn as conscripts. The German princes were more desirous to give the rights of citizenship to the Jews. The disabilities to which they had hitherto been subject, were removed; civil privileges were granted to them; the Israelitish consistory was established in Cassel, under the Westphalian government, for the improvement of their worship and their schools. Still more important are the improvements in the Jewish schools in Austria, where there are academies for rabbins at Prague and Lemberg; in Bavaria, where there is a similar institution, at Fûrth; and in the Prussian states, where

* It is well known that the literature of Spain is much indebted to the Jews. A list of authors of Hebrew origin gives 561 on philology, 20 on astrology, 67 commentators or expositors, 84 on philosophy, 52 in grammar, 36 on medicine, 18

historians, 52 jurists, 18 mathematicians, 57 poets, 8 on rhetoric, 68 on the Talmud, 19 theologians, and 73 translators.—*Journal of the Literary Convention*, held at New York, Appendix, No. I (New York, 1831).

they acquired all civil rights in 1811. There is no distinction whatever between Jews and Christians by the constitution of the U. States, but, in some of the states, certain officers, as the governor, counselors, representatives, are required to profess, under oath, their belief in the Christian religion. In England, the Jew bill, passed in 1753, enabling Jews to prefer bills of naturalization in parliament, without receiving the sacrament, was repealed the next year. In May, 1830, an attempt was made, in parliament, to remove the civil disabilities affecting the Jews, but was opposed by the ministry, and the question was lost. In France, the chamber of deputies voted, in 1830, that the Jewish ministers of worship should be paid from the public chest, like the Christian. In Germany, a number of Jews have lately abandoned the system of the rabbins, and performed divine worship in the German language, in a manner approaching that of the Christians. Hamburg is the seat of this society. In general, the Jews in Europe, without renouncing their religion, have, more than formerly, shown a disposition to adopt Christian refinement, while their brethren among the Mohammedans and heathens share the barbarism of their masters. By the ukase of March, 1817, important privileges are conferred on the Jews in Russia who embrace Christianity. Land is given to them gratuitously, where they may settle under the name of *The Society of Israelitish Christians*. They are immediately subject to a court at Petersburg, appointed by the emperor, are exempt from military service, from having soldiers quartered on them, from all taxes for 20 years, and may engage in any trade without being subject to the restrictions of the craft. (For the institutions for the conversion of the Jews, originating in England, see *Missions*.) The following is an estimate of the number of Jews in different parts of the world, taken from the Weimar *Ephemeriden Geographischen*:—*Europe*; in Russia and Poland, 658,809; Austria, 453,524; European Turkey, 321,000; States of the German Confederation, 138,000; Prussia, 134,000; Netherlands, 80,000; France, 60,000; Italy, 36,000; Great Britain, 12,000; Cracow, 7300; Ionian Isles, 7000; Denmark, 6000; Switzerland, 1970; Sweden, 450; total number of Jews in Europe, 1,918,053, or a proportion of 113th part of the population, calculated at 227,000,000.—*Asia*; Asiatic Turkey, 300,000; Arabia, 200,000; Hindostan, 100,000; China,

60,000; Turkestan, 40,000; province of Iran, 35,000; Russia in Asia, 3000; total, 738,000.—*Africa*; Morocco and Fez, 300,000; Tunis, 130,000; Algiers, 30,000; Abyssinia, 20,000; Tripoli, 12,000; Egypt, 12,000; total, 504,000.—*America*; North America, 5000; Netherlandish colonies, 500; Demerara and Essequibo, 200; total, 5700. New Holland, 50. Grand total, 3,218,000. Other estimates carry the number to five or even six millions. The black Jews, in the East Indies, are natives, and slaves who have embraced Judaism.—See Basnage, *Histoire des Juifs*, from the Christian era to 1716 (fifteen volumes); J. M. Jost's *History of the Israelites since the Time of the Maccabees*, (Berlin, 1820—1826, seven volumes, from 105 B. C. to A. D. 1320.) On the civil condition, commerce and literature of the Jews in France, Spain and Italy, during the middle ages, from the beginning of the eighth to the end of the sixteenth century, see Arthur Beugnot, *Les Juifs d'Occident*, &c. (Paris, 1824). The best religious history of the Jews is Peter Beer's *History, Doctrines and Opinions of all the religious Sects that have existed or do exist among the Jews, and of the mystical Doctrine of the Cabbala* (Brünn, 1822, two parts). See Zee's *History of the Jewish States* (Berlin, 1828); see also the *Hebrew Commonwealth*, translated from Jahn's *Biblische Archäologie* (Andover, 1828), and Milman's *History of the Jews* (London, 1829.)

Jewish Law. The sources of the Jewish law are the Mosaic law and the Talmud (q. v.); hence the rabbis are the Jewish lawyers. The Jewish law, in all its extent, is very complicated, and full of niceties. In some countries of Europe, the Jews enjoy a separate jurisdiction to a certain degree, and inherit according to their own law. (a) The Jewish matrimonial contract is made partly in writing and before witnesses, and partly by the delivery of a ring to the bride from the bridegroom. The husband acquires a right to every thing which his wife obtains by labor or otherwise; he has also the use of the fortune which she possessed at the time of the marriage, and is her sole heir. Testaments are governed by the principles of the *donatio inter vivos* and the *donatio mortis causa*, according as the will was made, in a state of health, or of dangerous sickness. The rules of legal descent among the Jews are as follows:—(aa) Among the descendants, the sons and their male descendants inherit first; after them the daughters, and, in case of there

being none, the female descendants in the next degree. (bb) After the descendants follows the father; if he is dead, the brothers of the deceased and their descendants, and, in failure of all these classes, the sisters of the deceased and their descendants. Persons related by the mother's side never inherit from each other: children may inherit from the mother; the mother never can from the children. Legitimate children do not exclude illegitimate, even if the fruit of an incestuous connexion, unless the mother of the illegitimate children is a slave, or not of Jewish blood; in which case, the children do not inherit from the father in any event. The first-born son receives a double share of the property which the father actually possessed, not, however, of uncollected debts. On the other hand, he has to bear also a double share of the debts due from his father. If the first-born dies before the division takes place, his right of primogeniture falls to his descendants. Any one may renounce, sell or give away his right of primogeniture. The hereditary succession of the husband and wife is regulated by the time of the continuance of the marriage. (c) Every grant must be public, and the property be regularly transferred; to annul a legal grant, a new grant, with proper formalities, is requisite. A verbal grant is binding only when made by a very sick person, or one in imminent danger. A Jew attains his majority at the age of 13 years and one day, if he has obviously reached the period of puberty. A Jewess, under the same circumstances, is of age at 12 years. A Jew is not allowed to engage in commerce before his 20th year. The girl remains, until she is full grown, under the paternal authority, when the father may give her in marriage, against her knowledge and wish. According to the laws of several countries, full age of Jews is the same as that of other inhabitants.

JEW-SHARP is a kind of musical instrument held between the teeth, which gives a sound by the motion of a spring of iron, which, being struck by the hand, plays against the breath. "The Jewstrump," says a diligent investigator of such matters, "seems to take its name from the nation of the Jews, and is vulgarly believed to be one of their instruments of music. But, upon inquiry, you will not find any such instrument as this described by the authors that treat of Jewish music. In short, this instrument is a mere boy's plaything, and incapable, of itself, of being joined either with a voice or any other in-

strument; and I conceive the present orthography to be a corruption of the French *jeu trompe*, a trump to play with. And in the Belgic or Low Dutch, from whence come many of our toys, a trump is a rattle for children. Sometimes they will call it a *Jews-harp*; and another etymon given of it is a *jaws-harp*, because the place where it is played upon is between the jaws." (*Pegge Anonymiana*, i, 82.)

JEZIRAH, in the Cabala, is the third world, the world of the thinking substances. In the Cabalistic theology, it is also the name of a book, in six chapters, which treats of the world, of motion, of time and of the soul. It is extremely obscure; every thing in it is expressed in numbers and letters. One tradition makes the patriarch Abraham the author. It is mentioned in the Mishna and Sanhedrim, and, therefore, must have existed before the Talmud. This book is very short, and many editions have been published. The last edition is by Rittangel (Amsterdam, 1642), with a Latin translation, equally incomprehensible.

JIDDA or JUDDA; a considerable commercial haven of Arabia, on the shore of the Red sea. It may be considered as the port of Mecca, and is supported partly by carrying on the trade with India and Egypt, and partly by the concourse of pilgrims from the coast, and of those from the opposite regions of Africa, who cross at Suakem to reach this famed seat of Mohammedan pilgrimage. It is situated in a barren, sandy district, destitute of water. The streets are very narrow. The entrance to the road is full of shoals, and it is dangerous to attempt going in without a pilot. The English trade here was formerly considerable; but numerous exactions have now reduced it to a low ebb. The Americans have some commerce with this place. Lon. 39° 15' E.; lat. 21° 29' N. (For further information, see Burckhardt's *Travels in Arabia*.)

JIHON, or GIHON, or SIHON, or AMOL, or AMU (anciently *Oxus*); a river of Central Asia, which rises from mountains between Great Bucharia and Chinese Tartary, and, after a N. W. course of more than 1200 miles, flows into the lake of Aral. The cities of Samarcand, Bucharia, Termed, Balk and Gaur are on its branches. It has been generally believed, that it formerly flowed into the Caspian sea, and that its course was turned into its present channel by the Tartars, according to some, before the 16th century, but according to others, about 1719. This opinion is re-

jected by Malte-Brun, and other geographers, who maintain that the Jihon always flowed into the lake of Aral, and that the rejected opinion was formed and propagated by persons whose knowledge was imperfect, particularly with regard to the form of the Caspian sea, or the existence of the lake of Aral.

JOAB, son of David's sister, and his first general, fought valiantly for David, but often showed a revengeful and artful spirit; for instance, against Abner (2 *Samuel*, iii, 27, 39) and Amasa (2 *Samuel*, xx, 9, seq.). His services secured him the favor of David, though that king was often offended with him (2 *Samuel*, xviii, 33, xix, 4). After David's death, he espoused the cause of Adonia, and was killed in the temple, by the altar, at the command of Solomon (1 *Kings*, ii, 28, seq.).

JOACHIM MURAT. (See *Murat*.)

JOACHIMSTHALER. (See *Dollar*.)

JOAN, the papess, according to a story long believed, but now acknowledged to be a fiction, was a native of Mentz, of the name of Gilberta or Agnes, who, falling in love with an Englishman at Fulda, went to travel with him, studied at Athens, and visited Rome. Continuing to conceal her sex, she took the name *Johannes Angelicus*, and rose, by her talents, from the station of a notary to the papal chair, under the name of John VIII (854 to 856, between Leo IV and Benedict III). She governed well, but, having become pregnant by a servant, or, according to some, by a cardinal, she was delivered in a solemn procession, and died on the spot, near the Coliseum, which place the popes are said to have avoided ever after in their processions. This story, first related by Marianus Scotus, in his *Chronicon* (in the 12th century), is not mentioned by any contemporary writer hostile to the papal see, and is generally considered, since Blondell's *Eclaircissement sur une Femme*, as a mere fable. The examination on the *sella stercoraria** perhaps gave rise to this story; perhaps it is a satire on the barefaced profligacy of some popes; perhaps it is a fruit of the excitement against the popes, which became very general in the 13th century; others still have thought it to be an allegory of the decretals of the pseudo Isi-

dore, then brought to light. Clemens Sylvius first showed the falsehood of the story. Spanheim defended the account in his *De Johanna Papissa*. Gibbon says, "Till the reformation, the tale was repeated and believed without offence, and Joan's female statue long occupied her place among the popes, in the cathedral of Sienna. She has been annihilated by two learned Protestants, Blondell and Bayle; but their brethren were scandalized by this equitable and generous criticism. Spanheim and L'Enfant attempted to save this poor engine of controversy; and even Mosheim condescends to cherish some doubt and suspicion."

JOAN OF ARC (*Jeanne d'Arc*); the Maid of Orleans. The belief, prevalent in the middle ages, that particular individuals were gifted with supernatural powers, as instruments of a higher will, explains the extraordinary character and conduct of the maid of Orleans. After the death of Charles VI, king of France, in 1422, Henry VI of England, then a child of nine months old, was proclaimed king of France, according to the treaty of Troyes (1420); his uncle, the duke of Bedford, acted as regent. France had been distracted, for 42 years, by civil dissensions. On one side were queen Isabella, the duke of Burgundy, and England; on the other, the dauphin Charles, who had been abandoned by his own mother, was supported by the Orleans party. This division, and the talents of the English generals, the earls of Somerset, Warwick, Salisbury, Suffolk, Arundel, Talbot and Fastolfe, had reduced nearly all France to the dominion of England. The dauphin, a youth of 19, was crowned at Poitiers as king Charles VII. He possessed many qualities proper for interesting his countrymen in his favor, and was wanting only in firmness and resolution. Still he maintained himself in France for the space of seven years. At length, Bourges, and the territory belonging to it, were nearly all that remained to him. Paris and the north of France, as far as the Loire, were in possession of the English. Salisbury had been besieging Orleans since Oct. 12, 1428. The city was bravely defended by Gaucour. Its fall would have ruined the cause of Charles. In the valleys of the Vosges, on the old frontiers of Lorraine, in the village of Domremy la Pucelle (q. v.), on the banks of the Meuse, lived a peasant girl, Jeanne d'Arc, whose parents were common country people of reputable character, and in good circumstances for their station. In the midst of

* From the time of Honorius II, 1061 to Leo X, the popes were actually obliged, after their election, to seat themselves upon a stool with an opening, where they were examined by the youngest deacon, in order to determine that they were males, with their organs perfect, because no mutilated person can be a member of the Catholic priesthood.

timid and superstitious persons, who were in continual trouble and alarm at the misfortunes of their country, Joan was quietly occupied in domestic employments, and sometimes in driving the cattle to pasture. Her history has been very minutely traced. The third volume of the Notices and Extracts from Manuscripts in the library of the king, by De l'Averdy (Paris, 1790, 4to.), contains whatever is important respecting her, taken from 28 manuscripts relating to her trial and condemnation. She was of a delicate frame, and uncommon sensibility of temperament. This, perhaps, was heightened by the circumstance of her being exempt from the common law of her sex; and Dufresnoy has remarked how this circumstance and her spirit of devotion may account for her visions. Her enthusiasm, and her habits of solitary meditation, explain the angelic voices and visions of the maid. While her companions were sporting beneath the Fairies' tree, the beautiful May (*le beau Mai ou l'arbre des fées*), not far from the fountain of Domremy—a tree which was once sacred to the Druids, and famous in many a ghostly tale—Joan was singing and dancing by herself, in pious enthusiasm, and binding garlands for the holy virgin, in the little chapel of “our Lady of Bellemont,” which she usually visited on Saturday. She was never a servant, at least not in an inn. The English chroniclers have misrepresented these facts; and Hume is also in error with regard to her age. The beautiful Joan was but 18 when she went to the dauphin at Chinon in Touraine. Commanded, as she asserted, by a vision of our lady of Bellemont, to raise the siege of Orleans, and to conduct Charles to Rheims to be crowned, she presented herself in February, 1429, to the governor of Vaucouleur, Robert of Baudricourt, who at first thought her possessed, and twice dismissed her; but upon her returning a third time, he sent her to Chinon with letters of recommendation. Here the dauphin ordered her to be examined by the bishop of Meaux and John Morin. She is also said to have immediately pointed out the king, whom she had never seen, and who had purposely mixed among his courtiers, and to have repeated to him a prayer which he had made to the virgin Mary. It is certain that she was examined for three weeks, by many intelligent men, counsellors of parliament and divines. She was then secretly inspected by the dauphin's mother-in-law and her court ladies, who declared her to be a true virgin (*qu'elle était une entière et vraie pu-*

celle). At length, being satisfied of the truth of her claims, D'Aulon, the most virtuous man at court, was appointed to be her constant attendant and brother in arms, and she received permission to hasten with Dunois to the deliverance of Orleans. From this period, she appears the finest character in the history of the middle ages of France. In a male dress, armed *cap a pie*, she bore the sword and the sacred banner, as the signal of victory, at the head of the army. Still no unfeminine cruelty ever stained her conduct. She was wounded several times herself, but never killed any one, or shed any blood with her own hand. There appears, as Fr. Schlegel says in his History of the Maid of Orleans, from old French Documents (*Geschichte der Jungfrau von Orleans, aus altfranz. Quellen*, Berlin, 1820), there appears to have been no other earthly passion in her heart than devotion to her country, to the descendant of St. Louis, and the sacred lilies. It is shown also, by the documents of her trial, and of the revision of it, in 1453, that she had not killed any of the enemy with her own hand, from a tenderness of conscience, and was even more anxious about the souls than the bodies of the English who were slain. Nevertheless, it would seem from some passages of Lenglet Dufresnoy (*Histoire de Jeanne d'Arc, Vierge Héroïne*, Paris, 1753, and Amsterdam, 1759), that she did not always carry the banner, and actually made use of the consecrated sword in case of necessity. This sword was taken by her directions from the church of St. Catharine at Fierbois, where, according to the story, nobody had before known of its existence. After sunset, she avoided the company of men, passed her nights with women, and kept all loose females, as much as possible, away from the camp. The general belief of her elevated mission, of which she herself was piously persuaded, produced the most extraordinary effects. Resolute, chivalrous, pious and brave, looking to one single aim, she was skilfully employed by the generals to animate the army, while they did not implicitly follow her counsels. The first enterprise was successful. With 10,000 men, under the command of St. Severre, Dunois and La Hire, she marched from Blois, and, on the 29th April, 1429, entered Orleans with supplies. By bold sallies, to which she animated the besieged, the English were forced from their intrenchments, and Suffolk abandoned the siege (May 8, 1429). Joan next captured several places in the enemy's

possession, and defeated them in a battle near Patay, where general Talbot was taken, and the valiant Fastolfe himself was forced to fly. Charles entered Rheims in triumph. At the anointing and coronation of the king, July 17, Joan stood at his side. In full armor, and bearing the banner, she took the office of a constable, and held the sword over the king. Her commission having been thus fulfilled, she wished to return to her home, but was prevailed upon to stay. All France now acknowledged Charles as king; and Bedford could only maintain himself by valor and prudence. He repulsed, in September, the assault upon Paris. Here Joan was wounded, and Charles retired to Bourges. A title of nobility was now conferred on the heroine and her family. She was first called *Dalis*, then *Dulis*, and, finally, *Dy Lays*; her coat of arms contained two golden lilies and a sword pointing upwards and bearing a crown. Meanwhile, Bedford was assembling new forces. Burgundy and Brittany still acknowledged the young king Henry VI, who had been crowned at Paris. Thus strengthened, the English again pushed on and besieged Compiègne. The maid threw herself into the town, as she had done at Orleans, but in a sally, May 25, 1431, was taken prisoner by the Burgundians. She surrendered to Lyonnel, the bastard of Vendôme. She was at first confined at Crotoy, but afterwards at Beaufort. Upon hearing that she was to be delivered to the English (king Henry having paid 10,000 livres for her), she attempted to escape by leaping from a window of the castle, and was seriously injured. In this condition, she came into the power of the English. At the instigation of her own countrymen, Pierre Cauchon, bishop of Beauvais, instituted a process against her, and the university of Paris demanded her execution. She was condemned by the church as a sorceress and heretic. The secular arm had no control over this decree. De l'Averdy gives this as an excuse for the inactivity of the king, who made little exertion in behalf of the heroine. But that light and indolent prince never showed himself zealous and constant in any thing. After four months' imprisonment, the innocent enthusiast, who had resolutely defended herself, and at the examination had named St. Michael as the angel whose voice she had heard in her father's garden, in her 15th year, and as her constant guardian and attendant, was sentenced, by the inquisitors at Rouen, to be burnt for sorcery and intercourse with infernal spirits. She was

carried, May 24, 1431, to the stake, when her courage appeared to be daunted. She submitted to the church, and declared her revelations to be the work of Satan. Her punishment was then commuted to perpetual imprisonment. But pretexts were soon found to treat her as a relapsed criminal, and, as such, she was burnt by a slow fire at Rouen, May 30, and her ashes were thrown into the Seine. She died with undaunted fortitude. When they were putting the inquisition cap on her head, before going to the pile, she said to her attendant, *Maitre, par la grace de Dieu, je serai ce soir en paradis*. There is a tradition that, when she expired, a white dove was seen to rise from the pile. Among the divines who had condemned her, there was only one Englishman, the bishop of Winchester. In 1450 and 1451, measures were taken for revising the process. 1455, the relations of Joan applied for a revision. Pope Calixtus III committed the affair to the archbishop of Rheims, the bishops of Paris and Coutance, and an inquisitor. This court pronounced, in 1456, their decision, that the 12 articles alleged against her were false, and declared her entirely innocent. Her memory was preserved by monuments. In the market-place at Rouen, there is a statue of her, on which, under her coat of arms, is the inscription:

*Regia virginæo defenditur ense corona ;
Lilia virgineo tuta sub ense nitent.*

The maiden's sword protects the royal crown ;
Beneath the maiden's sword the lilies safely bloom.

According to the portrait of the maid, which Alex. Lenoir discovered in the town-house at Orleans, where there is also a statue of her, and which he sent to the Paris museum of French monuments, *Aux petits Augustins*, she must have been exceedingly beautiful. Her features have a soft and enthusiastic expression; they have what the French call *l'intérêt du calme*. She has a cap with feathers on her head, and is holding in her hands a shield and the consecrated sword. A monument, with her bust, in marble, was erected to her in Domremy, September, 1820.—See Berriat St. Prix, *Jeanne d'Arc, ou Coup d'Œil sur les Révolutions au Temps de Charles VI et VII* (Paris, 1817); Lebrun des Charmettes, *Hist. de Jeanne d'Arc* (from original documents, Paris, 1817, 3 vols.); Jollois, *Hist. abrégée de la Vie et Exploits de Jeanne d'Arc* (Paris, 1821).—The name of the maid of Orleans is no less celebrated in the annals of poetry. The epic and romantic character of this subject has

been variously managed by different authors. Chapelain, a contemporary of cardinal Richelieu, in his epic poem, *La Pucelle*, sung her exploits in 12 times 1200 wretched verses, as Boileau says. In 1730, Voltaire undertook to parody the monstrous production of his predecessor, and, following Shakspeare, who had introduced this subject as an episode in the First Part of his Henry VI, where he represented the maid as a witch in confederacy with evil spirits, he turned the whole stream of his impure wit upon the subject. Thus was produced that too well known mock heroic poem, which Mercier called "a crime against the nation" (*crime anti-national*). It first appeared in print, 1757. The first poetical attempt towards restoring a subject, thus profaned by the grossest wit, to its native dignity, was made by Robert Southey, in his epic Joan of Arc. Dumenil's *Épopée Jeanne d'Arc, ou la France sauvée* (Paris, 1818), is very poor; D'Avrigny's *Pucelle d'Orleans*, a tragedy, has been occasionally performed at Paris; Alex. Soumet's *Jeanne d'Arc, Tragédie en cinq Actes et Vers*, appeared in 1825. But all these fall infinitely below the noble tragedy of Schiller, *Die Jungfrau von Orleans*, which first appeared in 1802. He has done more than Calixtus III for her fame; he has restored the high-souled enthusiast to her rightful place in the age of romance to which she belongs. He shows us the chivalrous heroine as an instrument of Heaven, engages our love for her, and makes her fall in glorious strife with her country's foes. Wetzels Joan of Arc, a tragedy (Leipsic, 1817), adheres more strictly than Schiller's to historical truth. Lebrun des Charmettes' *Orléanide*, a poem in 28 cantos (Paris, 1820), is modelled after the drama of Schiller.

JOANNINA, or JANINA; the capital city of Turkish Albania (Epirus), on the lake of Acherusia, in which there is an island with a strong castle, where resides the pacha of Janina. (See *Ali*, and *Greece, Revolution of*.) The city has a Greek archbishop, and about 30,000 inhabitants, mostly Greeks, who carry on a considerable commerce with Austria, Russia, and the Ionian Islands. Joannina was formerly the centre of the literary intercourse between the modern Greeks, and Italy, France and Germany. At the end of the last century, there were in this city two celebrated schools, in which mathematics and philosophy, together with ancient Greek, were taught. The one was founded by a merchant, Ghioni, in the last half of the 17th century, the other about 1790.

They had two libraries and a cabinet of natural history. The inhabitants of Joannina, who are among the best informed and most industrious of the Greeks, deposited the funds of the two colleges in the treasury of Venice; but, by the fall of that republic, they were lost. The schools were, however, maintained by the generosity of three Epirots in Russia—the brothers Zosima and Pikrosoy; the schools also received the interest of a million of rubles deposited in Russia. At the bombardment of the city by Ali Pacha, 1820, the buildings belonging to these institutions were destroyed, and all the books and manuscripts which they contained, among which were the original manuscripts of the geographer Meletos, a native of Joannina, were burnt. Besides the Greeks, there are in Joannina Mohammedans, Jews and Gypsies, but they all speak Greek.

JOB (Hebrew *Hiob*, i. e. the sufferer, the persecuted); the hero of an ancient Hebrew poem, which has been preserved to us in the canon of the Old Testament. It has been much disputed whether Job is a real or fictitious personage; whether the poem is epic, didactic, or dramatic; who is the author; what was his age and country; and when and where the scene is laid. The work has been attributed to Job himself, Moses, Elihu, Solomon and others. The scene of the poem (the land of Uz) is supposed to be in Arabia; but the time is by some placed in the age of the patriarchs, and by others, after the Babylonish captivity. The design of the work seems to be a justification of divine Providence and the inculcating a submission to the divine dispensations. The scene is partly in heaven and partly on earth; the actors are Jehovah, Satan, Job, and his four friends, Eliphaz, Bildad, Zophar and Elihu. Job, an upright man, with a family of seven sons and three daughters, with large herds and numerous servants, is suddenly, with the permission of Jehovah, and by the agency of Satan, deprived of his possessions and his children, yet submits patiently to the divine will. He is then further tried by the infliction of a sore disease, yet is silent. Three friends come to console him; but, struck with his desolate condition, they burst into lamentations, and sit down with him seven days in silence, "for they see that his grief is very great." At the end of this period, the grief of Job finally breaks out into bitter complaints. The remainder of the poem is occupied with the answers of his friends, and his replies to them, until the

close, when God himself is introduced answering Job out of a whirlwind. After this event, Job lived 140 years, became richer than he had been before, and begat seven sons and three daughters. The whole poem is characterized by freshness and truth of coloring, simplicity and dignity of manner, and loftiness and purity of sentiment. Intensity of passion is combined, in a striking manner, with deep views of the nature of man and the providence of God. Stuhlmann (*Hob, ein religiöses Gedicht*) maintains that Moses could not have been the author of the poem, because it contains no allusions to the Mosaic doctrines; though this argument seems inconclusive, because, the scene being in Arabia, and the persons Arabian, such allusions would naturally be avoided. Doctor Good (*The Book of Job, from the Hebrew, with Notes, London, 1812*) considers Moses to be the author, and calls it a *Hebrew epic*. An Amended Version, with Notes, by Mr. Noyes, was published in Boston, 1827. (See the Introductions of Eichhorn, Rosenmüller and Jahn.)

JOCASTA (also *Epicasta*); daughter of Menæceus, sister of Creon, and wife of the Theban king Laius, by whom she had Œdipus. After having unconsciously slain his own father, Laius, Œdipus solved the riddle of the Sphinx, and received, as his reward, the hand of Jocasta, his own mother (of which circumstance he was ignorant). After the error was discovered, Jocasta hanged herself in despair. (See *Œdipus*.)

JODELLE, Etienne, born at Paris, 1532, wrote the first regular tragedies and comedies for the French stage. Among the former are *Cléopâtre captive* and *Didon*. His comedy *Eugène* was praised by Ronsard. Though Jodelle enjoyed the favor of Charles IX and of Henry II, he died in great poverty in 1573. His works were collected by De la Motte (Paris, 1574, 4to., and Lyons, 1597, 12mo.). He was one of the French Pleiads. (See *French Theatre*, in the article *France*.)

JÉCHER, Christian Theophilus, a celebrated German scholar, was born in 1694, at Leipsic, where he studied medicine and theology (1712). In 1714, he delivered lectures, in which he showed himself an adherent to the philosophy of Leibnitz and Wolf. In 1732, he was made professor of history; in 1735, doctor of philosophy; and in 1742, librarian of the university. He died in 1758. His *Allgemeines Gelehrten Lexikon* (Leipsic, 1750

et seq., 4 vols.) is still valuable. Adeling brought down a supplement to this work (in 2 vols. 4to., Leipsic, 1784) to the letter I, which Rotermund of Bremen has continued.

JOEL, one of the twelve minor prophets, the time and place of whose birth are not known. From his style and poetical language, most critics place him in the golden age of Hebrew literature. Tradition makes him a contemporary of Hosea and Ezekiel, because he is placed between them in the canon. He describes a dreadful desolation of the country by grasshoppers (whether these signify an army, or really grasshoppers, commentators disagree), and finishes with a picture of better times (the destruction of the Chaldeans), and a call upon the Deity for vengeance. His imagery is often imitated in the Apocalypse. He was always reckoned among the canonical writers, and is quoted in the New Testament (*Acts* ii. 17), which is a proof of his canonical authority at that time. Conjectures respecting his country and age are collected from the rabbins in Carpzovius's *Introd. in V. T.* p. 302, from which it appears that he lived in Judah, because his writings relate to Judah and Jerusalem.

JOHANNES SECUNDUS (the bibliographical name of John Everard, a celebrated Latin poet) was born at the Hague, 1511. His father was a distinguished lawyer, who was president of the supreme council of Holland at Mechlin, during the reign of the emperor Charles V. At Bourges, where John studied law under Alciatus, he received a doctorate; but literature had more attractions for him than jurisprudence. He became acquainted with some poets of the age, and his intercourse with them tended to strengthen his predilection for works of imagination. He also distinguished himself by his skill in painting, sculpture and engraving; but he was most indebted for his fame to his poetical works. For the improvement of his talents, he travelled to Italy, and thence to Spain, where he became secretary of cardinal Tavera, archbishop of Toledo, by whose advice he attended Charles V. on his journey to Tunis. The weak state of his health, however, did not permit him to endure the hardships of war, and he returned to the Netherlands, where he died, at Utrecht, in 1536, of a malignant fever. Few modern Latin poets have left us such pleasing amatory poems as his. The Kisses of Johannes Secundus are best known. His works, consisting of elegies, odes, epigrams and miscellaneous poems,

were published by his brothers, Nic. Grudius and Andr. Marius (who were likewise distinguished as poets), and have gone through many editions. One of the latest is that of 1771 (Leyden), with a French translation. The Kisses have been repeatedly translated into English, German, and French.

JOHANNESBERG, or BISCHOFFSBERG; a village and beautiful castle, built (between 1722 and 1732) on a hill in the Rheingau (Nassau), formerly belonging to the bishop of Fulda, under the jurisdiction of the elector of Mentz. It is celebrated for its excellent Rhenish wines. The best is made on the castle hill itself. In 1807, the vineyards and castle were given by Napoleon to marshal Kellermann. In 1816, the emperor of Austria gave them to prince Metternich, on condition of receiving a tenth part of the produce. Sixty-three morgen (a morgen is somewhat less than an acre) yield annually about 32,500 bottles, worth from 23,000 to 24,000 guilders. Good years yield double this quantity, exclusive of a quantity of less valuable wine. The cultivation of the vineyards which produce this wine is expensive, and the profit not great, though it sells high. In 1809, a bottle of the best quality cost four guilders on the spot, and the wines of 1779 to 1783, and that of 1801, were sold for twelve guilders a bottle. The view from the mountain is one of the finest on the Rhine. The eye wanders over the charming Rheingau, with its numberless villages, seats and convents, hills with their castles, and the noble river with its islands.

JOHN THE BAPTIST was born six months before Jesus (their mothers were relations), of a Levitical family in Judea, and his birth was attended with circumstances (*Luke*, chap. i.) which marked him out as one chosen by God to accomplish the divine purposes. He chose the austere course of life suited to a person dedicated to God, and by his early simplicity in food and dress, by his solitary meditations on, and deep knowledge of, the spirit of the Holy Scriptures, obtained that independence and strength of mind, which made him the object of universal admiration, when he appeared in the character of a prophet. His teachings were earnest exhortations to repentance and preparation for the kingdom of heaven, which he announced to be at hand. His preaching, as recorded in the Gospels, was severe and powerful. He proclaimed himself the harbinger of a greater, who should come after him, and fulfilled his mission to pre-

pare for him the way, with a zeal equalled only by his self-denial and humility. He baptized many converts to his doctrine, and obtained respect among all classes, by the contrast of his severe virtue with the corruption of the times. When the higher mission of Jesus was made known, at the time of his baptism in the Jordan, John pointed his disciples to this new master, and saw, without envy, his own words fulfilled—"He must increase, but I must decrease." He coveted no fame, and wished no further success. He desired only to maintain the right of speaking the truth, and fell a victim to his boldness. To gratify a vindictive woman, Herod Antipas, tetrarch of Galilee, caused him to be beheaded in prison. A number of his disciples continued faithful to him till death, and are said to have established the still existing sect of *Sabians*, or *St. John-Christians*, in Persia, distinguished for their veneration of John the Baptist. (See *Sabians*.)

JOHN THE EVANGELIST is one of the most pure and lovely characters of Christian antiquity. In his youth, he left his nets at the call of Jesus, and from that time followed his divine teacher with unchanging fidelity. Not only on his journeys was he always with him, and in all conditions his most confidential friend, but, even when the other disciples fled, he accompanied him to the judgment seat; and under the cross, his expiring Lord pointed him out to Mary, as one who was to stand in the place of a son and protector to her. Hence he was called emphatically *the disciple whom Jesus loved*. The gentleness and tenderness which breathe through the writings of John, adapted him peculiarly to understand all the feelings of his Lord. He shared the labors and sufferings of the apostles, lived in Ephesus, was for a time an exile in Patmos, perhaps resided in Rome, and finally died at an advanced age, in the bosom of the Ephesian church, which was dearest of all to his heart. St. Jerome gives a very affecting account of the last years of his life. As the infirmities of age made him unable to address the church in a systematic discourse, he always desired to be conveyed to the assembly, and, as often as he came, addressed them thus: "Children, love one another." Being asked, at length, why he always repeated this exhortation, with nothing new, he answered, "Because it is the precept of the Lord; and if this is fulfilled, it is enough." John was the author of one of the Gospels, of the book of Revela-

tion, and of the three Epistles which bear his name.

JOHN. Besides the apostle, there are many saints and martyrs of this name:—1. *St. John*, a warrior in the fourth century, who encouraged Athanasia, with her three daughters to brave martyrdom. He was himself beheaded.—2. *St. John of Nicomedia*, who was skinned and tortured with salt and vinegar, by order of Diocletian, because he tore down the imperial edict which ordered the imprisonment of all priests, and required them to embrace paganism.—3. *St. John the Alms-giver* was born in the island of Cyprus in the 6th century. He was made patriarch of Alexandria, and spent every thing he had for the poor. His day is January 23; with the Greeks, November 11.—4. *St. John of Damascus*, or *Johannes Damascenus*, in the dispute concerning the worship of images, defended the practice, against Leo Isauricus and Constantinus Copronymus. He died in 760, in a convent. His day is May 6; with the Greeks, November 29. The most complete edition of his works was published by Le Quien, 2 vols., Paris, 1512, folio. Several of his works have never been printed.—5. *St. John of God (Joannes a Deo)*; born at Monte Mayor el Novo, in the province of Alentejo, in Portugal, in 1495, of poor parents. While keeping a shop in Granada, being affected by a sermon of John of Avila, he gave all his property to the poor, and became his pupil. He displayed so much fanaticism, that he was thought to be mad, and carried to an hospital; but, being soon released, he established an hospital himself, which he maintained by alms. He founded a convent, from which originated the Hospitalers or Brothers of Charity. He practised the greatest severity towards himself. The bishop of Tuy, who came to Granada, gave him the name of *John of God*, which he retained. He died in 1550, and, in 1680, pope Urban VIII canonized him.—6. *St. John Chrysostomus*. (See *Chrysostom*.)—7. *St. John Nepomuk*. (See *Nepomuk*.)—There are, besides, many martyrs and monks bearing the name *John* and *St. John*.

JOHN; the name of 22 or 23 popes, the last of whom died in 1419. That no subsequent pope has called himself John, is probably owing to the polluted character of several of the name, and particularly the public condemnation of the last for atrocious crimes. Among these pontiffs are the following:

St. John (John I) succeeded Hormisdas in 523, and was a friend of Boëthius, who dedicated to him several of his

works. Theodoric sent him to Constantinople, to induce the emperor Justin to adopt milder measures towards the Arians. Though John was received with uncommon pomp, his mission was fruitless, and on his return Theodoric threw him and his companions into prison, where he died in 526. His day is May 27. Felix IV succeeded him.

John VIII, or *Johanna Papissa*. (See *Joan, the papess*.)

John XI; son of Marozia and the pope Sergius III. He ascended the papal chair in 931, though very young, by the influence of his mother, who governed Rome. Marozia, after the death of her husband Guido, married Hugh, king of Lombardy, who insulted Alberic, son of Marozia and Guido. Alberic revolted, and imprisoned Marozia and the pope, who died in prison in 936. Leo VII succeeded him.

John XII, son of Alberic and grandson of Marozia, though an ecclesiastic, succeeded to the dignity of his father, a patrician of Rome, and in 956, after the death of Agapetus II, possessed himself of the tiara, though only 18 years old. He was the first pope who changed his name on his accession to the papal dignity. He applied to the emperor Otho I for assistance against Berengarius II, crowned the emperor, 962, and swore allegiance to him, but soon after revolted against Otho, who caused him to be deposed by a council, in 963, and Leo VIII to be elected. On Otho's death, in 964, John returned, and died in the same year. He polluted the papal see by the most revolting licentiousness. Benedict V succeeded him.

John XIII; made pope in 965 by the influence of the emperor, for which the nobles of Rome hated and expelled him. Otho II restored him to Rome, and was crowned by him. He died in 972. According to Baronius, he introduced the custom of consecrating bells.

John XV; a Roman, elected in 985. He was the first who solemnized a formal canonization (of Ulric, or Udalric, bishop of Augsburg) in 993. He settled the disputes between king Ethelred of England and Richard of Normandy. He induced Otho III to assist him against Crescentius, but died whilst the former was besieging the castle of St. Angelo, in 996.

John XVIII, or *XIX* (if John XVI is counted, which Baronius does not do); elevated to the throne in 1004. We mention him merely because a union is said to have been effected between the Eastern and Western churches, under his pontificate; and, in the mass, besides the

name of the pope, that of the patriarch of Constantinople is said to have been mentioned.

John XXI, or XXII (James of Ossa), a native of Cahors, chancellor of Robert, son of Charles II of Naples, was archbishop of Avignon, and was elected pope at Lyons in 1316, after the death of Clement V. He resided at Avignon, but had many adherents in Italy. He is important in German history, on account of the active part which he took in the disputes of the emperors Louis of Bavaria, and Frederic of Austria. He was entirely in the interests of France. He died in 1334, after having been once deposed by Louis, who caused Nicolas V to be elected in his stead. The Clementines and the Extravagantes (see *Canon Law*, and *Corpus Juris*) prove his learning. As a theologian, he held a heretical opinion respecting the beatific vision of God, maintaining that Mary and all the blest could not enjoy it until after the final judgment, and was on the point of being deposed by a general council on this account. He established several bishoprics and archbishoprics in France, which increased his revenues, so that he was enabled to leave immense treasures, which were not all well acquired. He fixed the festival of the Holy Trinity on the Sunday after Whitsuntide. Benedict XII was his successor.

John XXII, or XXIII (Balthasar Cossa), born in Naples, was a pirate in his youth, afterwards became an ecclesiastic, studied at Bologna, was made a *doctor juris*, and was elected pope in 1410, by the council of Pisa, after the death of Alexander V, on condition that, if Gregory XII and Benedict XIII would resign, he would also retire, to end the schism. He summoned the council of Constance, demanded by the emperor Sigismund, in 1415, where he appeared in person, and confirmed his resignation, March 2; but, March 20, he fled, secretly, from Constance to Schaffhausen, and revoked his resignation. He was cited before the council, but, not appearing, was suspended, and finally deposed, May 29, for seventy crimes (malice, tyranny, incest, licentiousness of all kinds, intercourse with his brother's wife and with 300 nuns, simony, murder, &c.), attested by 37 witnesses. He was confined in the castle of Gottleben, near Constance. The elector of the Palatinate was then charged with his safe keeping, and he remained at Manheim and Heidelberg, under custody. Four years after, he was released, on the pay-

ment of 30,000 gold guilders, went to Italy, and threw himself at the feet of pope Martin V, in Florence, who pardoned him, and made him cardinal, bishop of Tuscoli, and dean of the college of cardinals. He died soon after, in November, 1419.

JOHN, king of England, born in 1166, was the youngest son of Henry II, by Eleanor of Guienne. Ireland being intended for his appanage, he was sent over, in 1185, to complete the conquest; but such was the imprudence and insolence of himself and his courtiers, that it was found necessary to recall him. Although his father's favorite, he joined his brother Richard in his last unnatural rebellion, and partook with him the curse pronounced by the heart-stricken king and parent on his death-bed. He was left without any particular provision, which procured for him the name of *Sans Terre*, or Lackland; but Richard, on his accession, conferred on him the earldom of Mortaigne, in Normandy, and various large possessions in England, and married him to the rich heiress of the earl of Gloucester. This kindness did not prevent him from forming intrigues against his brother, in conjunction with Philip of France, during his absence in Palestine; but Richard magnanimously pardoned him on his return, and left him his kingdom, in preference to Arthur of Brittany, the son of his elder brother, Geoffry. So imperfectly was the rule of primogeniture then established in England, that no disturbance ensued in that country, although the French provinces of Anjou, Touraine and Maine declared for Arthur, who was taken under the protection of the king of France. A war ensued, in which John recovered his revolted provinces, and received homage from Arthur for the duchy of Brittany, inherited from his mother. In 1200, he married Isabella of Angoulême, after divorcing himself, on some pretence, from his first wife. In 1201, some disturbances again broke out in France, whither he led another expedition; and the young Arthur, having joined the malcontents, was captured, and confined in the castle of Falaise, whence he was subsequently removed to Rouen, and never heard of more. The manner of his death is not certainly known; but it was generally believed that John stabbed him with his own hand, and he now became the object of universal detestation. The states of Brittany summoned him to answer the charge of murder, before his liege lord, king Philip; and, upon his refusal to appear, the latter assumed the execu-

tion of the sentence of forfeiture against him, and in this manner the whole of Normandy was recovered by the French crown, after its alienation for three centuries. John laid the fault of his disgrace upon his English nobles, whom he harassed by fines and confiscations; but, after some ineffectual attempts, he was obliged to acquiesce in a truce in 1206. The pope at this time was the haughty and able Innocent III, who, in consequence of a contested election for the see of Canterbury, nominated a creature of his own, cardinal Stephen Langton. John, highly enraged, acted with his usual haste and folly, and displayed so much contempt for the papal authority, that Innocent laid the whole kingdom under an interdict. This quarrel lasted some years, and the king, by his tyranny, depriving himself of the support of his nobles, was perplexed on every side. In order to give some lustre to his degraded administration, he undertook expeditions into Scotland, Wales and Ireland, in which he was successful, and, in particular, quelled all opposition to his authority in the last country. In the mean time, the court of Rome excommunicated the king, personally, and formally absolved his subjects from their allegiance. Philip of France was again ready to put the sentence against John into execution, and prepared an expedition in the ports of Picardy, which, however, the latter was enabled to oppose. So much disaffection, nevertheless, prevailed, that Pandulph, the pope's legate, induced him not only to receive Langton, as archbishop of Canterbury, but abjectly to resign his kingdoms of England and Ireland to the holy see, in order to receive them again as its vassal, with absolution. This ignominious compact was executed at Dover, in May, 1213; and the pope, now regarding England as his own, and jealous of the aggrandizement of Philip, required the latter to desist from hostilities against a country under the protection of the see of Rome. Philip received this mandate with great indignation, but, in consequence of a victory over his fleet, was gradually brought to reason. Flushed with this success, John resolved to endeavor to recover his continental dominions; but the English barons declined the service. In the next year, however, he carried over an army to Poitou, but, after some partial successes, was obliged to return in disgrace. John had, by this time, rendered himself the object of such universal contempt and hatred, that his nobles, who had long felt aggrieved by the usurpation of their sove-

reigns, and of the reigning one in particular, determined to seize upon so favorable an opportunity to control his power, and establish their privileges. Langton produced to them a copy of the charter of rights granted by Henry I, and, at a general meeting in London, in January, 1215, they laid their demands before the king, which he attempted to elude by delay. In the mean time, he sought to ingratiate himself with the clergy and the pope, with whom he lodged an appeal against the compulsory proceedings of the barons. The politic pontiff, who found it his interest to support a sovereign who had so far humbled himself, declared his disapprobation of their conduct; but, little moved by the declaration, the latter assembled in arms at Oxford, where the court then was, and, choosing a general, immediately proceeded to warlike operations. They were received without opposition in London, which so intimidated the king, that he consented to sign such articles of agreement as they thought fit to dictate. Such were the steps which produced the *Magna Charta*, which was signed by John at Runnymede, on the banks of the Thames, June 19, 1215. By this charter—the basis of English constitutional freedom—not only were the nobles protected against the crown, but important privileges were granted to every order of freemen. The passive manner in which John yielded to these restrictions of his power, indicated a secret intention of freeing himself from his obligations. In order to lull the barons into security, he dismissed his foreign forces, but, in the mean time, was secretly employed in raising fresh mercenaries, and in seeking the concurrence of the pope, who issued a bull, annihilating the charter, as extorted from his vassal, contrary to the interests of the holy see. He even forbade John to pay any regard to its conditions, and pronounced a sentence of excommunication on all who should attempt to enforce it. Thus furnished with spiritual and temporal arms, the king left his retreat, and carried war and devastation through the kingdom. His barons, taken by surprise, could make no effectual resistance, and, despairing of mercy from John, sent a deputation to France, in which they offered the crown of England to the dauphin Louis. Philip gladly accepted the proposal, and Louis, with a fleet of 600 vessels, landed at Sandwich, and proceeded to London, where he was received as lawful sovereign. John was immediately deserted

by all his foreign troops, and most of his English adherents; but the report of a scheme of Louis for the extermination of the English nobility, arrested his progress, and induced many to return to their allegiance. While the king's affairs were beginning to assume a better aspect, he had the misfortune, in a march from Lynn across the sands into Lincolnshire, to lose, by the sudden flow of the tide, all his carriages and baggage. Being already in a bad state of health, this event so aggravated his disorder, that he died at Newark, in October, 1216, in the 49th year of his age, and 17th of his reign. No prince in English history has been handed down to posterity in blacker colors than John, to whom ingratitude, perfidy and cruelty were habitual. Apparent gleams of vigor and energy were, indeed, occasionally manifest; but they always proved mere explosions of rage, and soon subsided into meanness and pusillanimity. His private life was stained with extreme licentiousness, and the best part of his conduct as a ruler, was the attention he paid to commerce and maritime affairs. More charters of boroughs and incorporations for mercantile pursuits date from him than from any other of the early kings, and the popular constitution of the city of London was his gift. He left, by his second wife, a family of two sons and three daughters, and had many illegitimate children.

JOHN SCOTUS. (See *Erigena*.)

JOHN THE PARRICIDE, or JOHN OF SUABIA, was the murderer of his uncle, the emperor Albert I. (See *Albert I.*) Himself of a mild, peaceful disposition, he would, perhaps, have endured the injustice of his uncle, who withheld from him his hereditary dominions and fief, had not his anger been fanned into a flame by the enemies of the emperor. After the perpetration of the bloody deed (in the neighborhood of Hapsburg, May 1, 1308), the murderers took to flight; among them was John, who wandered in the monastic habit through Italy, and finally sunk into such obscurity, that nothing was known with certainty of him. Rodolph of Wart was apprehended and punished by the rack on the spot where the deed was committed; the other murderers escaped, with the exception of three boys, who confessed nothing, though threatened with a cruel death, which they actually suffered. But a sanguinary revenge was taken on the relations of the murderers by Leopold, the second son of the emperor, and by Agnes, his sister, the widowed queen of Hungary. They were executed

with the most terrible torments, their castles demolished, and the inhabitants slain by hundreds. More than 1000 innocent men, women and children perished. The history of John of Suabia has given rise to the tragedy of that name, which, for more than twenty years, has been performed on the German stage.

JOHN OF FIESOLE. (See *Fiesole*.)

JOHN OF LEYDEN. (See *Anabaptists*.)

JOHN SOBIESKI, or JOHN III, king of Poland, one of the greatest warriors of the 17th century, was born 1629. His father, James Sobieski, equally distinguished for his virtues in peace and his courage in war, took great care to nourish the same qualities in his sons, Mark and John. The Poles had just been defeated at Pilawiecz, when these youths returned from their travels. This misfortune only served to excite their courage. Mark fell in a second engagement with the Cossacks, on the banks of the Bog; but John, more fortunate than his brother, became successively grand marshal and general of the kingdom. Full of courage, he exposed himself, like the meanest soldier, to the greatest dangers, and, when urged to take care of his person, replied, "If I follow your advice, you will despise me." He became the terror of the Tartars and Cossacks, over whom he was perpetually gaining new victories. Nov. 11, 1673, he won the celebrated battle at Choczim against the Turks, who lost there 28,000 men. The following year, he was elected king of Poland. When the Turks laid siege to Vienna, in 1683, he hastened thither with a Polish army, and rescued the imperial city. His cavalry was splendid, but his infantry poorly equipped. To conceal the condition of the latter, he was advised to send one of the worst clothed regiments of infantry over the river by night, to save them from the gaze of spectators. Sobieski was of a different opinion. When the regiment was on the bridge, he said to those who surrounded him, "Behold them—they are invincible; they have sworn never to wear any dress but that of enemies: in the last war, they were all clothed in the garb of Turks." On his arrival, he chose the most advantageous position, ascended an elevation to observe the disposition of the grand vizier, and remarked—"He has selected a bad position. I understand him; he is ignorant, and persuaded of his own genius. We shall gain no honor from this victory." Sobieski was not deceived. The next day the Turks were driven from their camp in terror, leaving behind the holy

standard of Mohammed, which the conqueror sent to the pope with the following letter : " I came, I saw, and God has conquered." On his entrance into Vienna, at the head of his victorious Poles, the inhabitants received him with indescribable enthusiasm. They pressed around to embrace his feet, to touch his garments or his horse, and proclaimed him their savior and deliverer. He was moved even to tears, and, under the strong impulse of his feelings, called this the happiest day of his life. In 1693, he was attacked by a dangerous sickness, and was doomed to witness that dissension which usually attends the election of a king in Poland. Foreign enemies united with domestic factions. Sobieski was no longer in a condition to quiet the disturbances, and the moment was fast approaching which was to deprive him at once of his life and his throne. The queen wished him to make a will, and communicated her wishes through one of the bishops. He refused, asserting that, in a nation like his, party rage would prevail over all his influence. He died 1696, in the 23d year of his reign. Scarcely had he closed his eyes, when jealousy and envy united to stain his memory. Some reproached him with having purchased lands contrary to the laws, which forbade the king to hold any private property. Others maintained that the Christian league which he had joined against the Turks, had cost his country more than 200,000 men. Others still asserted that he was too fond of money and expensive journeys. Certainly no court was ever less stationary than his. He performed the tour of Poland every year with his queen, and visited all his estates, like a nobleman. This fault, however, if it may be called a fault, should not cast a veil over the virtues of Sobieski. He was fond of the sciences, spoke several languages, and deserved to be loved for his gentleness and affability. His three sons died without leaving any male descendants. The character of Sobieski is displayed in the *Lettres du Roi de Pologne Jean Sobieski à la Reine Marie Casimire, pend. la Camp. de Vienne, trad. par le Comte Plater, et publ. par N. A. de Salvandy* (Paris, 1826).

JOHN VI, emperor and king of Portugal, Brazil and Algarve, born May 13, 1767. On account of the mental derangement of the queen Francisca, his mother, he was proclaimed director of the government in Portugal, Feb. 10, 1792. In 1807, he embarked for Brazil with his family, and landed at Rio de Janeiro, Jan.

6, 1808. Dec. 18, 1815, he raised Brazil to the rank of a kingdom, and united all his states into one monarchy. After the death of his mother, March 20, 1816, he became king. In 1790, he married the Infanta Charlotte, daughter of Charles IV of Spain. (Respecting his son Pedro, and the late revolution in Brazil, see *Pedro*.) His second daughter, Maria, wife of king Ferdinand VII of Spain, died in 1818; a third is the wife of Charles, Infant of Spain. On account of the old commercial relations between Portugal and England, John was not in a condition to maintain a strict neutrality towards France. In 1793, he had sent the Spanish government a small body of soldiers to aid in the defence of the Pyrenees; but, after Spain had made peace (1795), and concluded an alliance (1796) with France, Portugal was treated as an enemy by both. John looked to England, therefore, for protection. Bonaparte at length induced the Spanish court to make an attack in earnest upon Portugal, which ended in the peace of Badajoz (Jan. 6, 1801); Olivenza was ceded to Spain, and a part of Guiana to France. After the peace of Tilsit, Napoleon, not content with the vast sum of money by which John had purchased his neutrality, required him also to close his ports against the English, to arrest all of that nation in Portugal, and to confiscate their estates. As the regent complied with the first only of these requisitions (in consequence of which a British fleet blockaded his harbor), the *Moniteur* declared that the house of Braganza had ceased to reign (see *Spain since 1808*), and an army composed of French and Spanish soldiers marched into Portugal. The prince-regent now resolved to transfer his court to Brazil, as he had been advised to do in 1800. The English ambassador, viscount Strangford, and the British admiral, sir Sidney Smith, facilitated the accomplishment of his design. November 26, the prince-regent appointed a junta for administering the government, and, on the 27th, the royal family embarked, passed the mouth of the Tagus on the 29th, with a fleet of 8 ships of the line, 4 frigates, 4 brigs, and 20 other vessels, in sight of the advance-guard of Junot's army, which entered Lisbon the next day. December 1, the anniversary of the elevation of the house of Braganza, the ensigns of Braganza were succeeded by the French eagle. An earthquake and a storm, which the Portuguese fleet encountered in the view of the city and the enemy, completed the submission of the Portuguese.

From Rio de Janeiro, May 1, 1808, the prince-regent declared all treaties with France and Spain null, and formed a closer union with England, which, powerfully supported by the bravery of the Portuguese army and the ardor of the people, recovered for him the possession of his European kingdom. Marshal Beresford continued to exercise an important influence on the affairs of Portugal, till August, 1820, when, by the convocation of the cortes, a new political system was established. In America, the Portuguese also recovered the portion of Guiana which they had lost, and occupied French Guiana; the latter, however, was restored to France in 1817. Meantime, the enlightened ministry of the prince-regent carefully attended to the improvement of Brazil. The inquisition was abolished, religious freedom introduced, the evils of slavery diminished, and European artists, manufacturers, merchants and agriculturists encouraged to settle in the country. A large Swiss colony, New Freyberg, was founded in 1819. John took part in the transactions of the congress of Vienna. The revolution of the Spanish colonies in South America (perhaps the refusal of Spain to restore Olivenza) led the court of Rio de Janeiro to occupy Monte-Video, and the left bank of the La Plata. Spain had recourse to the intercession of Austria, Russia, Prussia and Great Britain, whose declaration, directed to the marquis of Aguiar, Portuguese secretary of state for foreign affairs (Paris, March 26, 1817), induced the court of Brazil to evacuate Monte-Video, on condition that Olivenza should be restored. A treaty was then concluded with Buenos Ayres, and the quarrel with Artigas (q. v.) continued till 1820. A conspiracy against the existing government was discovered at Lisbon in 1817, and suppressed by the execution of those engaged in it. After this, the freemasons were persecuted more severely than ever. In consequence of the Portuguese revolution and the convocation of the cortes, 1820, which the monarch recognised as lawful, he returned, in 1821, to Portugal; the crown-prince remained in Brazil. This vast country separated itself entirely from the mother country, where an absolute government was, in the meantime, established. John was incompetent to unite the constitutionalists and royalists. He was himself in danger of falling a victim to the intrigues of the latter, when he was rescued by an English vessel in the Tagus. Portugal and Brazil also assumed a hostile attitude; but, August 29, 1825, by the me-

diation of England, John VI concluded a treaty with his son, the emperor Pedro I of Brazil, in which he acknowledged that country as an independent kingdom, wholly separate from Portugal, and his son as emperor, reserving for himself, personally, the title of emperor of Brazil. This good-natured monarch, who was incompetent to struggle with the troubles of his age, and the political degeneracy of his nation, died March 10, 1826, having previously appointed his daughter Isabella regent of Portugal. (See *Portugal*, and the *Portuguese Revolution*.)

JOHN BAPTIST JOSEPH; arch-duke of Austria, sixth son of the emperor Leopold II, and of the Infanta Maria Louisa, daughter of Charles III of Spain; born Jan. 20, 1782; director-general of the engineers and artillery. This prince is more indebted to himself than to his instructors for the cultivation of his talents. At an early period, he felt an inclination for military science, to the study of which, and also of history, he directed his attention. He had desired in vain, in 1797 and 1799, to learn the art of war under his brother Charles. After the latter had left the command, and Kray had met with several losses, the arch-duke John received, in 1800, the command of a defeated army. His first measures were successful, but, Dec. 3, 1800, the battle of Hohenlinden decided the event of the war. A series of errors cost the Austrians almost all their artillery, and nearly 40,000 men. A second battle, at Salzburg, did not check the victorious Moreau. The arch-duke showed personal valor on these unhappy days, and did every thing to restore the courage of his troops. In September, 1805, when the war was near breaking out, the arch-duke hastened to Tyrol, commissioned to complete, as quickly as possible, the military organization in that place and in the Vorarlberg. He afterwards joined, in Carinthia, the arch-duke Charles, whose plans for saving Vienna and the monarchy were frustrated by the battle of Austerlitz and the ensuing peace. When preparations for war were recommenced, after the peace of Tilsit, the arch-duke labored upon a system of attack and defence for Salzburg and Inner Austria. He prepared, through Hormayr, the famous Tyrolese insurrection. At the breaking out of the war, in 1809, he commanded the army of Inner Austria, destined for Italy and Tyrol. He conquered at Venzone and Pordenone, beat the viceroy Eugène at Sacile, and penetrated as far as the Adige, when the defeat at Ratisbon obliged him to re-

treat. On the Piave he again fought a battle with disadvantage, but no important consequences followed. The battle of Tarvis determined him to retreat still farther. The mistakes of Jellachich frustrated the plan of the arch-duke to overcome the enemy in detail, to renew the interrupted communication with Tyrol, to deliver Inner Austria, and, by marching to Vienna, to divide the forces of Napoleon. June 14, he lost the battle of Raab against the viceroy, owing to the Hungarian insurrection. He afterwards visited Italy, where, as a deputy for the emperor, he received homage in Milan. He commanded at the siege of Hüningen, in 1815, compelled the city to surrender, and demolished this dangerous fortress. He afterwards went to Paris, visited England, and returned, in 1816, through the Netherlands, to Vienna.

JOHN'S, ST., OF PRINCE EDWARD'S ISLAND; an island in the gulf of St. Lawrence, near the north coast of Nova Scotia, to which government it was once annexed, but it now has a separate governor. Lon. $44^{\circ} 22'$ to $46^{\circ} 32'$ W.; lat. $45^{\circ} 46'$ to $47^{\circ} 10'$ N. It is 117 miles long, from north-east to south-west, about 20 in average breadth; population, about 5000; chief towns, Charlotte's Town (the capital), George Town, Prince's Town, &c. The north and south coasts are much indented with bays. It is well watered, the soil generally fertile, and the rivers abound with fish, as salmon, trout and eels. It was taken from the French by the English, in 1745, when it had 10,000 head of black cattle, and several of the farmers raised 12,000 bushels of corn annually. When possessed by the French, it was so much improved as to be called the *granary of Canada*.

JOHN'S, ST.; a river of New Brunswick, which rises in Canada and the northern part of Maine, waters the north-east part of Maine, flows south-east through New Brunswick, and runs into the bay of Fundy, on the west side of the city of St. John's. It is 350 miles long; the tide flows up about 80 miles; it is navigable for boats 200 miles, and for sloops of 50 tons 80 miles. This river and its branches water a large tract of excellent country, much of which is settled. About 30 miles from its mouth commences a fine level country of rich meadow lands, well clothed with timber and wood, as pine, beech, elm, maple and walnut. The river furnishes a great quantity of salmon, bass and sturgeon; and it is the common route to Quebec. About a mile above the city of St. John's is the only entrance into this

river. It is about 80 or 100 yards wide, 400 yards long, called the *falls* of the river. It being narrow, and a ridge of rocks running across the bottom of the channel, on which there are not above 17 feet of water, it is not sufficiently spacious to discharge the fresh waters of the river above. The common tides here rising about 20 feet, the waters of the river, at low water, are about 12 feet higher than the waters of the sea. At high water, the waters of the sea are about 5 feet higher than those of the river; so that, at every tide, there are two falls—one outwards and one inwards. The only time of passing with safety, is when the waters of the river and of the sea are level, which is twice in a tide, and continues only about 20 minutes each time.

JOHN'S ST., in New Brunswick. (See *New Brunswick*.)

JOHN'S, ST., in Newfoundland. (See *Newfoundland*.)

JOHN, ST., CHRISTIANS OF. (See *Sabians*.)

JOHN, ST., KNIGHTS OF. The knights of St. John, or hospitalers of St. John, afterwards called *knights of Rhodes*, and, finally, *knights of Malta*, were a celebrated order of military religious, established at the commencement of the crusades to the Holy Land. As early as 1048, some merchants from Amalfi, in Naples, established a church at Jerusalem, and built a monastery, which they dedicated to John the Baptist. It was the duty of the monks, who were called *brothers of St. John*, or *hospitalers*, to take care of the poor and sick, and, in general, to assist pilgrims. This order, which gradually obtained important possessions, at the beginning of the twelfth century, was regularly instituted as a military order by the principal, Raymond du Puy, retaining all their former laws. Besides the performance of their vows of chastity, obedience and poverty, it was their duty to aid in defending the church against infidels. Raymond also divided the order into three classes—knights (who should bear arms), chaplains (regular ecclesiastics) and servitors (*serventi d'armi*), whose duty it was to take care of the sick and accompany pilgrims. This order long maintained itself against the arms of the Turks and Saracens by union and courage; but, in 1191, it was driven from Palestine. Upon this, the knights conquered Cyprus, but soon lost it again, and established themselves, in 1309, on the island of Rhodes, where they remained upwards of 200 years. This island was vigorously defended against Mohammed II, by Pierre d'Au-

busson (grand master, who died 1503). Driven thence by the sultan Soliman II (1522), the knights went to Candia, then to Venice, Rome and Viterbo, and especially to Nice, Villa Franca and Syracuse, till Charles V (1530) granted them the islands Malta, Gozzo and Comino, on condition of perpetual war against the infidels and pirates, and the restoration of these islands to Naples, if the order should succeed in recovering Rhodes. From this period, they were commonly called *knights of Malta*. In 1565, under the command of Lavalette (who died 1568), they repelled a violent attack from Soliman II with great loss. After this, they continued their naval battles with the Turks till modern times, and saved themselves from ruin, in various wars with the Porte, only by their unyielding courage. In 1760, however, they would doubtless have been overpowered but for the interposition of the French. After that, their naval expeditions were seldom any thing more than mere show. The chief of this order, which had great possessions in almost every part of Europe, was called *grand master of the holy hospital of St. John of Jerusalem*, and *guardian of the army of Jesus Christ*. He was chosen by vote, and lived at La Valette, in the island of Malta. He was addressed by foreign powers with the title of *altesza eminentissima*, and received annually 6000 crowns from the treasury of the order, together with all the revenues from the three islands, so that his annual income may be estimated at nearly a million guilders. The secular power was principally in his hands, but even here he was limited by the *governors of the various languages*, so called, who gave laws, fixed the taxes, &c. The spiritual power (that is, the immediate affairs of the order) was exercised by the chapter, which consisted of eight *ballivi conventuali*, and in which the grand master presided. The principal offices in the order were held by the pillars (*piliers*) of the eight languages, into which the knights were divided, according to their respective nations. The languages were those of Provence, Auvergne, France, Italy, Arragon, Germany, Castile and England. From these languages, the *ballivi conventuali* above-mentioned were chosen, and their lands were divided into priories, these into *bailliages*, and these again into *commanderies*. Of the priories, the German had the preference, and was called the *grand priory*. It was filled by the grand prior of Germany, or the master of the knights of St. John throughout

Germany, who was a prince of the empire, and resided at Heitersheim, a city and castle in Brisgau, now in the circle of Treisam, in Baden. The master of the knights of St. John was subject to the grand master at Malta. He himself had the jurisdiction over Brandenburg, Hungary and Bohemia. Austria, Bohemia and Moravia formed, besides, a separate grand priory of the German language. The last master of the knights of St. John in Germany, or grand prior of Heitersheim, a count of Reichenbach-Fouxmaigne (or the baron Rink of Balenstein), by the peace of Presburg and the formation of the confederacy of the Rhine, lost all his possessions in West Suabia, which fell into the hands of the grand-duke of Baden. Of the eight languages above-mentioned, the English became extinct in the sixteenth century; the three French languages perished during the revolution; those of Castile and Arragon were separated from Malta at the peace of Amiens, and the Italian and German languages have since been abolished. Thus the order of St. John is to be regarded as extinct, and its restoration is the less to be looked for, as the island of Malta has been formally ceded to England. The Prussian order of knights of St. John, founded by Frederic William III, and which is a royal order, can be considered only as a memorial of an order venerable for its antiquity and its services. (See *Prussia*.) The knights of St. John observed the rules of the order of St. Augustine. The Protestants, however, were not bound to celibacy. Every member was required to be of good family. The knights who could bring indubitable evidence of noble ancestry were called *cavalieri di giustizia* (knights by right). Those, on the contrary, who could not prove their nobility, but were, nevertheless, received on account of their merits, were called *cavalieri di grazia* (knights by favor). The duty of each knight—to take the field at least three times against the infidels, or the pirates of Barbary—was rarely performed in recent times, and, by the peace of Amiens, all hostilities against the Turks were forbidden. In peace, these knights wore a long black mantle; a gold cross of eight points, enamelled white: in war, they wore a red jacket or tabard, charged with a full white cross. Only in spiritual concerns was the order subject to the pope: in all temporal ones, they enjoyed unlimited sovereignty. Their naval force, in 1770, consisted of 4 galleys, 3 galeots, 4 ships of 60, and 2 frigates of 36 guns,

with various smaller vessels. When Malta was unexpectedly attacked by Bonaparte, June 8, 1798, the island capitulated without resistance. (See *Hompesch*, and *Malta*.) In 1800, the English reduced it by famine, and it has been, ever since, in their hands. At the peace of Amiens (1802), it was stipulated that the island should be restored to the knights, under the guarantee of a neutral power; but as the English continued to entertain apprehensions lest the French would retake Malta, and thus destroy their superiority in the Mediterranean, they continued in possession of it. Dec. 16, 1798, the order had chosen for their grand-master the Russian emperor, Paul I, who declared the capitulation of 1798 an act of treachery, and took the knights of St. John under his protection. This choice met with much opposition, even from the pope himself. After the death of Paul I (Feb. 9, 1805), the pope appointed an Italian (Tommasi) grand-master, and, on his decease, the grand chapter chose Caracciolo. The chief seat of the order had been, hitherto, Catania in Sicily. In 1826, the pope permitted the chapter and the government to remove their seat to Ferrara. Before the French revolution, the number of knights of this order was estimated at 3000. (For further information, see *Malta*.)

JOHN BULL, the sportive, collective name of the English people, was first used by dean Swift.—*Jonathan*, or *brother Jonathan*, is applied, in the same way, to the people of the U. States.—The Irish *Paddy* (from *Patriek*), the Scotch *Sawney* (from *Saunders*, which comes from *Alexander*), are more particularly applied to individuals than to the Irish and Scotch people collectively.—*Yankee* (q. v.), also, signifies a single American, particularly a native of the Eastern States; whilst *Uncle Sam*—a colloquial and rather low expression, derived from *U. S.*, the abbreviation of *United States*—is used to denote the government of the U. States collectively.—*John Bull* is used by the English themselves to convey the idea of an honest, blunt, but in the main good-natured, character. With foreigners, it is used to express the insular peculiarities and prejudices of the nation, and their inability to accommodate themselves to the circumstances of foreign countries.

JOHN DORY. (See *Dory*.)

JOHN'S FIRE. Among the Romans, the festival of Vesta was celebrated by kindling a fire, with dancing and rejoicings. In the early periods of Christianity, the an-

cient pagan rite was perpetuated of setting fire to consecrated herbs, or laying them upon the coals. This ceremony was called *John's fire*, or the *herb fire*. Superstitious people believed that the smoke of these herbs would keep off the devil, storms and witches, or preserve from those evils the houses where they were burnt, for the succeeding year.

JOHNS, Thomas; an English gentleman, who distinguished himself by the cultivation of literature. He was born in 1748, studied at Oxford, made the tour of Europe, and collected a noble library, to which he added a typographical establishment, whence proceeded the works on which his literary reputation is founded. They consist of splendid editions of the chronicles of Froissart and Monstrelet; Joinville's memoirs of St. Louis; the travels of Bertrandon de la Brocquiere in Palestine; and Ste. Palaye's life of Froissart; all translated by himself from the French. He died in April, 1816.

JOHNSON, Samuel, a clergyman, distinguished for his zeal in the cause of civil liberty, was born in 1649. During the time that lord Russel, with his coadjutors, was promoting the bill for excluding the duke of York, he published a tract entitled *Julian the Apostate*, meant as a refutation of the doctrine of passive obedience by doctor Hicke. For this book he was prosecuted in the court of king's bench, and sentenced to fine and imprisonment. Inability to pay the fine caused him to be confined in the rules of the prison, where he was privately assisted by the benefactions of his political friends, and continued to disperse several pieces against popery. In 1686, when the army was encamped upon Hounslow Heath, he wrote *An humble and hearty Address to all the English Protestants in the present Army*. For this production he was committed to close custody, tried before the king's bench, and condemned to stand in the pillory in three places, to pay a fine of 500 marks, and to be publicly whipped from Newgate to Tyburn. Before the execution of this disgraceful sentence, he was deprived of his orders. He bore all these indignities, including the whipping, which was inflicted with great severity, with the firmness and alacrity of a martyr, which he was deridingly called; and, happily, some informality in the process of degradation preserved to him his living. With unbroken spirit he continued to employ his pen in the same cause, until the revolution changed his situation. He received a present of £1000, and a pension of £300

per annum, for the life of himself and his son. He continued to write in favor of king William with much strength of reason, but with a degree of acrimony which produced some personal annoyance from opposing partisans, which had little effect upon a man of so determined a spirit. Notwithstanding his attachment to the new government, he freely censured many of its acts, and even contended for annual parliaments. He died in 1703. His works were published in 1710, 1 vol., folio, and re-edited in 1713.

JOHNSON, Samuel, LL. D.; one of the most distinguished English writers of the 18th century. He was born at Lichfield, in Staffordshire, in 1709, in which city his father was a small bookseller. He was the elder of two sons, the younger of whom died in his infancy; and he inherited from his father a robust body and active mind, together with a scrofulous taint, which impaired his sight and hearing, and a strong disposition to morbid melancholy. He also derived from the same source a marked attachment to high church principles, and a decided predilection for the family of Stuart. He received his early education, partly at the free-school of Lichfield, and partly at Stourbridge, in Worcestershire; and, on returning from school, he remained two years at home. Having acquired reputation from his exercises, particularly of the poetical class, a neighboring gentleman of the name of Corbet offered to maintain him at Oxford as companion to his son. He was accordingly entered of Pembroke college in 1728, being then in his 19th year; but he exhibited no marked attention to his studies in the first instance, and the state of indigence into which he fell by the neglect of the promised assistance, on the part of the family by whose advice he was sent to Oxford, produced a degree of mental anxiety, which he is said to have attempted to conceal by affected frolic and turbulence. Still he acquired credit by occasional poetical compositions in the Latin language; but, after all, left Oxford, after a residence of three years, without taking a degree. About this time, according to his own account, he received a strong religious impression from the perusal of Law's Serious Call to a devout and holy Life. Soon after his return to Lichfield, his father dying in very narrow circumstances, he was constrained to accept the situation of usher at the grammar-school of Market Bosworth. This situation his impatience under the haughty treatment of the principal soon induced

him to quit; and he passed some time as a guest with a medical schoolfellow, settled at Birmingham. Here he wrote essays for one of the journals, and translated from the French father Lobo's Travels in Abyssinia. Returning to Lichfield, he published proposals for the republication of the poems of Politian, with a life, and a history of modern Latin poetry, which prospectus was but little attended to. Disappointed in this scheme, he offered his services to Cave, as a contributor to the Gentleman's Magazine, which, however, was but a slight step towards a maintenance; and, in 1735, he sought to improve his condition by a marriage with Mrs. Porter, the widow of a mercer. Her fortune of £800 was a dowry of some moment to a suitor in the situation of Johnson; and the fact of her being twice his own age, and possessed of no pretension to personal attraction, renders his subsequent description of this union as a "love match on both sides" the more extraordinary. He now took a large house at Edial, with a view to take pupils and boarders, but the plan did not succeed; and, after a year's trial, he resolved to seek his fortune in London, in company with one of his few pupils, the celebrated David Garrick. In March, 1737, the two adventurers accordingly arrived in the metropolis, Johnson with his unfinished tragedy of Irene in his pocket, and with little to depend upon but his slender engagement with Cave. At this time he became acquainted with the reckless and unfortunate Savage, and in some respects his personal conduct was unfavorably affected by the intimacy; but from irregularity of this nature he was soon recovered by his deeply-grounded religious and moral principles. His first literary production, which attracted notice in the metropolis, was his London, a Poem, in imitation of the third satire of Juvenal. He soon after made an attempt to obtain a Dublin degree of M.A., through a recommendation to Swift, in order to obtain the mastership of a free grammar-school in Leicestershire, but could not succeed. Failing in this attempt, his engagement in the Gentleman's Magazine led to a new exercise of his powers in the composition of parliamentary debates, which, being then deemed a breach of privilege, were published under the fiction of Debates in the Senate of Lilliput. The extraordinary eloquence displayed in these productions was almost exclusively the product of his own invention; but it is probable that he adhered more faithfully

to the tenor of the arguments of the real speakers than to their language. He however confesses himself, that he "took care the Whig dogs should not have the best of it." His attachment to the Jacobites was also further manifested by the composition of a humorous pamphlet, in 1739, entitled *Marmor Norfolciense*, consisting of a supposed ancient prophecy, in Latin monkish rhymes. For some years longer, the Gentleman's Magazine received the chief of his attention. For this miscellany, he composed several excellent biographical articles, and, in 1744, published his celebrated Life of Savage separately. In 1747, after a number of abortive projects, he sent out his plans for an English Dictionary, in an admirably composed pamphlet, addressed to the earl of Chesterfield, who, however, concerned himself very little in the success of the undertaking. The time that he could spare from this compilation, which has been justly accounted a wonderful exertion of industry, was allotted to various literary avocations. In the same year, he furnished Garrick with his admirable prologue, on the opening of Drury-lane theatre; and, in 1749, published another admired imitation of Juvenal, which he entitled the Vanity of Human Wishes. In the same year, his tragedy of Irene was produced at Drury-lane theatre, under the auspices of Garrick. It was performed 13 nights with but moderate applause, and Johnson, satisfied that he was not formed to excel in the drama, wisely gave up the endeavor. In March, 1750, appeared the first paper of the Rambler, the gravity of the tone of which, notwithstanding its acuteness of observation, richness of illustration, and dignity of expression, prevented it from obtaining a wide circulation as a periodical paper, although, when collected into volumes, the author himself lived to see it reach a tenth edition. A short time before the appearance of the Rambler, half deluded by his political dislike of Milton, he hastily adopted the imposture of Lauder, in his attempt to fix the charge of plagiarism on that great poet. When undeceived, however, he insisted upon Lauder's signing a formal recantation, and, possibly as some atonement, wrote a prologue to Comus, when acted for the benefit of Milton's granddaughter. In the year 1755 was published his long-expected Dictionary, to which his name appeared with the degree of M. A., obtained from the university of Oxford, by the good offices of Mr. Warton. The approaching publication of this

work lord Chesterfield had favorably announced, some months before, in two papers of the World; but Johnson, conscious of having received no sort of support or encouragement from that nobleman during its progress, addressed to him a well-known letter, replete with pointed sarcasm and manly disdain. The Dictionary was received by the public with very general applause; and although its neglect of the northern etymologies, and the defects rendered apparent by more recent research, have somewhat lessened its original reputation, it still remains the leading work of the kind in the English language. In its progress, however, this great work had done nothing beyond merely supporting him; and it appears, from an arrest for a very trifling sum, in the year subsequent to its publication, that his necessities continued undiminished. An edition of Shakspeare, the Idler, with occasional contributions for a literary magazine, formed the desultory occupation of several succeeding years. In 1759, he wrote his celebrated romance of Rasselas, Prince of Abyssinia, which fine performance he composed in the evenings of one week, in order to defray the funeral expenses of his aged mother. At length, in 1762, the Bute administration granted him a pension of £300 per annum, which he accepted, after a short struggle against the reception of a favor from the house of Hanover. His own sarcastic definition of the word *pensioner*, in the Dictionary, was naturally enough quoted upon this occasion; but the sterling and acknowledged merits of the man formed a satisfactory apology. His advanced reputation and amended circumstances now considerably enlarged his acquaintance, and he became member of a weekly club, in Gerrard-street, Soho, composed of the most eminent men of talents of the day, and also commenced that intercourse with the Thrale family which produced him so much social enjoyment. In 1765 appeared his long-promised edition of Shakspeare, which was ushered in by an admirable preface; but the work itself did not altogether answer public expectation, owing principally to the superficial acquaintance of the commentator with the writings of the age in which Shakspeare flourished. In 1770, although his pension was given without conditions, his attachment to the monarchical side in general politics, led him to compose a pamphlet, entitled the False Alarm, in favor of the resolution of the house of commons in the affair of Wilkes—that expulsion implied incapacity of re-

election. This production was followed by *Thoughts on the late Transactions in Falkland's Island*, against the conduct of Spain in regard to that unprofitable possession; the *Patriot*, written on the era of a general election, in 1774; and *Taxation no Tyranny*, a more considerable effort, which made its appearance in 1775, against the arguments of the American colonists, relative to the power claimed by the mother country to tax them at pleasure. This pamphlet, although vigorously composed, was more dictatorial than argumentative, and abounding, as it did, with irritating sarcasm, did little service to the cause thus espoused. At this time, Johnson was encouraged in a view of obtaining a seat in parliament, but, meeting with no encouragement from the ministry, the scheme was dropped. In 1773, he made a tour to the Western Isles of Scotland, in company with his friend Boswell, of which he gives a highly instructive account in his *Journey to the Western Isles of Scotland*. In this production, he pronounced decidedly against the authenticity of *Ossian*, which sentence involved him in a personal broil with Macpherson. In 1775, he received the diploma of LL. D. from the university of Oxford, and soon after visited France, in company with the *Thrales* and *Baretti*. His last literary undertaking was his *Lives of the Poets*, which was completed in 1781; they were written to prefix to an edition of the works of the principal English poets, and, in a separate form, comprise 4 vols., 8vo. With an occasional exhibition of political bias, and strong prejudices, a conspicuous instance of which is supplied by the life of Milton, they form a valuable addition to English biography and criticism. The concluding portion of the life of this eminent man was saddened by the loss of many old friends, and by declining health, rendered doubly distressing in his case by a morbid apprehension of death, which neither his religion nor philosophy could enable him to bear with decent composure. In 1783, he was greatly alarmed by a paralytic stroke, and his health never wholly recovered the shock, although he lived to the 13th December, 1784. For some days previously, he retained all his horror of dissolution; but he finally died with devotional composure. This event took place in his 75th year, and his remains were interred in Westminster abbey, with great solemnity, being attended by a respectable body of eminent characters, and his statue has been placed in St. Paul's cathedral. From the nu-

merous and copious biographical tributes to the memory of doctor Johnson, and especially that of Boswell, few persons have been made so well known to the public, either as authors or men. In the former capacity, he is more to be admired for vigor and strength than for novelty of conception. No writer delivers moral maxims and dictatorial sentences with more force, or lays down definitions with more grave precision. He also excels in giving point to sarcasm, and magnificence to imagery and abstraction. His critical acumen, setting aside personal and political prejudices, was likewise very great; but he is utterly averse to the easy and familiar, both in his style and sentiment; the former of which made an era in English composition. The admiration of its exuberance of words of Latin etymology, and its sonorous rotundity of phrase, after having betrayed some able writers into injudicious imitation, has subsided, and the share of influence which remains has indisputably improved the general language.—As a man, doctor Johnson was, in mind as in person, powerful and rugged, but he was capable of acts of benevolence and of substantial generosity, which do honor to human nature. His strong prejudices have been already mentioned, and it is to be regretted that his admirable conversational and argumentative powers were sullied by dictatorial arrogance, and the most offensive impatience of contradiction—qualities that were unhappily heightened by the extreme deference and lavish admiration with which he was treated on arriving at the summit of his reputation. The effect was more injurious to himself than his hearers, as it evidently fostered the seeds of bigotry and intolerance, with which he set out in life. Upon the whole, however, both the moral and intellectual character of doctor Johnson stands very high, and he may be regarded, without hesitation, as one of the most eminent of the distinguished writers of the 18th century. His works were published collectively, in 11 vols., with a life of the author, by sir John Hawkins, 1787, and in 12 vols., by Murphy, in 1792. (See his life by Boswell, Hawkins, Murphy, &c.)

JOHNSON, sir William; an English military officer, who served with distinction in North America, in the middle of the last century. He was a native of Ireland, and was descended from a good family long settled in that country. Early in life, he came to America, under the care of his uncle, sir Peter Warren, K. B., and,

entering into the army, he gradually rose to the rank of colonel. In 1755, he was appointed to the command of an expedition fitted out against the French fort of Crown Point, when, though the main object of the undertaking was not effected, the colonel defeated a body of Indian, Canadian and French troops, commanded by baron Dieskau, who was taken prisoner. The British general was rewarded for his conduct on this occasion by a baronetcy, and a gratuity from parliament of £5000. He had settled on the Mohawk river, acquired a considerable estate, and ingratiated himself both with the American settlers and the neighboring Indians. His ability as a negotiator was displayed in his intercourse with the latter, with whose manners and customs he was intimately acquainted. He made a treaty with the Senecas, which was concluded at his house at Johnson's-hall, where he appeared April 3, 1764, as English agent and superintendent of Indian affairs for the northern parts of America, and colonel of the six united nations. He died at the same place in 1774, much regretted for his private worth as well as for his abilities, which had been so usefully exerted in the cause of his country. He was the author of a paper on the Customs, Manners and Languages of the Northern Indians of America, published in the 63d volume of the Philosophical Transactions.

JOHNSON, Samuel, first president of King's college, New York, was born at Guilford, Connecticut. He entered the college at Saybrook at about 14 years of age, and was graduated in 1714. In 1716, a college was established, by the general court of the colony, at New Haven, and Mr. Johnson was appointed tutor, though not more than 20 years old. In 1720, he became a preacher at West Haven. A short time afterwards, he became an Episcopalian, and, in 1722, went to England to obtain ordination. Here he received the degree of master of arts at Oxford and Cambridge. In 1723, he returned, and settled at Stratford, where he preached to about 30 Episcopal families in the place, and about 40 in the neighboring towns. He was treated, by the people at large, as a schismatic and apostate, and continually thwarted, the object being to drive him from the country. This treatment he endured with patience and firmness. In 1743, the university of Oxford made him a doctor of divinity. In 1754, he was chosen president of the college just established at New York, and filled the office, with much credit, until

1763, when he resigned, and returned to Stratford, where he resumed his pastoral functions, and continued them till his death, January, 1772, in the 76th year of his age. He was a man of great learning, quickness of perception, soundness of judgment, and benevolence. While bishop Berkeley was residing in Rhode Island, which he did two years and a half from the time of his arrival, in 1729, doctor Johnson became acquainted with him, and embraced his theory of idealism. Doctor Johnson's publications were chiefly controversial. He also published a Hebrew and an English Grammar.

JOHNSTONE, or JOHNSON, Charles, an ingenious writer, was a native of Ireland. He was born in the early part of the last century, was called to the bar, and went over to England to practise, but, being afflicted with deafness, confined himself to the employment of a chamber counsel. His success not being great in this way, he turned his attention to literature, and his first literary attempt was the celebrated *Chrysal*, or the *Adventures of a Guinea* (two volumes, 12mo.), a work which attracted much attention. The secret springs of some political intrigues on the continent were unfolded in this production, which, together with smart and piquant sketches of many distinguished characters of the day, including statesmen, noblemen, women of quality, citizens, and persons of every description, who had claimed any share of public notice, rendered it exceedingly popular. As usual, in such works, however, some truth is blended with much fiction, and, although, in regard to known personages, little is absolutely without foundation, much exaggeration prevails. His exposure of the orgies of a club of fashionable profligates, held at the seat of a dissipated nobleman in Buckinghamshire, produced no small sensation at the time. He wrote other works of a similar class, in which much knowledge of life and manners is united to a considerable talent for spirited caricature. In 1782, he went to India, and became concerned in editing a Bengal newspaper. He died in Calcutta, about 1800.

JOINT, in general, denotes the juncture of two or more things. The joints of the human body are called, by anatomists, *articulations*. The suppleness to which the joints may be brought, by long practice, from the time of infancy, is very surprising. Every common posture-master shows us a great deal of this; but one of the most wonderful instances of it was

in a person of the name of Clark, and famous for it in London, where he was commonly known by the name of *Clark the posture-master*. This man had found the way, by long practice, to distort many of the bones, of which nobody before had ever thought it possible to alter the position. He had such an absolute command of his muscles and joints, that he could almost disjoin his whole body; so that he once imposed on the famous Mullens, by his distortions, in such a manner, that he refused to undertake his cure; but, to the amazement of the physician, no sooner had he given over his patient, than he saw him restore himself to the figure and condition of a proper man, with no distortion about him.

JOINT-STOCK COMPANIES. Where any branch of business requires a greater capital to prosecute it with advantage than can ordinarily be furnished by an individual, or by a number of individuals actually engaged in conducting it, or where the business is attended with great risks, and may, as events turn out, be very profitable, or result in great losses, as in the case of insurance, it is desirable that the laws should give facility to the combination of the contributions of numerous persons, in great or small amounts, to make up the requisite capital. The first and most obvious combination for purposes of business, is that of copartnerships, whereby each of the members renders himself answerable, *in solido*, or absolutely, and to the full extent, on all contracts made by the company. This is a sort of association, existing in all places; but if the business to be conducted be of the descriptions above mentioned, the copartnership is not a convenient mode of association, since the capital contributed by many must necessarily be managed by a few; and therefore, if each member is liable, *in solido*, on the contracts of the company, the fortune of each is put in jeopardy, by ever so small a contribution to the joint-stock. This must operate, of course, to discourage useful undertakings on a large scale, and even if it did not, it might still be very important to provide for associations, with a limited liability of the individual members, since the ruin of any individual will necessarily affect others to a greater or less extent. The shocks, and individual derangements and reverses, which are necessarily incident to enterprises of industry and trade, make it very desirable to secure, by some modes of association, an apportionment of risks, losses and gains

among a great number. This is done by means of private corporations, joint-stock companies, and limited copartnerships. In regard to the two first descriptions of association, it is not always the purpose of their institution to limit the responsibility of the members. In the case of towns, for instance, and so in regard to some other local corporations, an execution, issuing on a judgment recovered against the corporation, may be levied upon the property of any member. So, in some of the U. States, the individual members of banking or manufacturing corporations are liable absolutely, and without limit, for the debts of the company; but, in general, in both corporations and joint-stock companies, only the capital stock is liable for the contracts of the company. Each member pays in his amount of this stock, which he knows to be subject to the risks of the business to be pursued. He can estimate precisely, therefore, the extent, the utmost limit, of his hazard in the most unfavorable event. With this limitation, many will be ready to embark their capital in enterprises attended with the chances of great gain, or losses, according to the event, who would be quite unwilling to take the hazard of being individually liable for the whole amount of the losses of the whole concern, or of guaranteeing the responsibility of the other members of the company as copartners. In this way, enterprises conducive to the general prosperity are promoted, which individuals would not otherwise engage in. Formerly, when the pursuits of commerce were less systematically conducted, and its risks and its profits more uncertain, commercial joint-stock companies were much more frequent than at present. These companies were favored by governments, in the first place, as promoting trade; in the second, as the means of raising a revenue. The government granted to a certain company, or to certain persons, the exclusive right to carry on a certain branch of trade or production, for a certain time, or within certain limits. The company paid the government for this privilege, intending, of course, to indemnify themselves by their profits. They paid a tax with the intention of reimbursing themselves, just as an importer pays duties on his goods, intending to charge the amount, with a profit, in the price to the consumer. It was in opposition to these monopolies that the doctrines of free trade, as they are called, originated; and, considered in reference to such monop-

olies, those doctrines are undoubtedly just, and so universally held to be; but they are extended by many much beyond these limits. Where only the fund is liable, and not the individuals who contribute it, no injustice is done to the creditors of the company, provided the law secures the actual payment of the fund; for if a person gives credit to a certain fund, knowing the risks to which it is exposed by the kind of business in which it is embarked, he has no ground of dissatisfaction with the members of the company, or the laws, though this fund should prove to be insolvent. This is the most limited responsibility of the contributors to a joint-stock. In other associations of this kind, the contributors are liable to a certain amount for the debts of the concern; as, for instance, to an additional amount equal to that of their respective shares of stock; or each is liable for his proportion of the debts, according to that of his stock. There are also, in the different associations of this description, under the laws of different countries, various conditions on which the liability depends; and also various conditions, which must be complied with, in managing the concerns of the company, in order to keep within the limit of the modified responsibility. Still another description of joint-stock companies is that of limited copartnerships, or companies in which one or more of the members are liable *in solido*, and the others no otherwise liable than for the loss of the proportion of capital which they have put into the concern. This is uniting in the same company the characteristics of a corporation with the most limited responsibility of individual members, and those of a copartnership with an unlimited individual liability. The evident advantages of limited copartnerships, by giving encouragement to persons depending on income, and not devoting themselves personally to the prosecution of active business, to devote their capital to production and trade, without subjecting them to unlimited responsibility, recommend them to adoption in every code of laws. The French code contains such a provision, but none such has heretofore been adopted in the English laws, nor are such associations provided for generally in the U. States, at the time of writing this article [1831], though a law to this effect has been passed in New York, and the interest and discussion excited on the subject will probably lead to similar enactments in the other states. Joint-stock companies, whatever may be

their form, and however extensive or limited may be the liability of the members, are subject to one abuse, which grows out of their very nature and constitution, and cannot, therefore, be wholly prevented. They are liable to be used, by fraudulent or over sanguine people, as bubbles. The fact of their being subject to such perversion, produces a strong and unjust prejudice against them, in the minds of many persons. There is no institution or form of association that is free from abuses and perversions. The engines of greatest power act the most destructively when their powers are wrongly directed, or when they are deranged in their action; but this is no ground of argument against making use of them. It is only a reason for precautions and regulations.

JOINT TENANTS are those that hold lands or tenements by one title, without partition. The creation of an estate in joint tenancy depends on the wording of the deed or devise by which the tenant claims title, and cannot arise by act of law. If any estate be given to a plurality of persons, without adding any restrictive, exclusive, or explanatory words, this makes them immediately joint tenants in fee of the lands. If there be two joint tenants, and one release the other, this passes a fee without the word *heirs*. Joint tenants may make partition. The one party may compel the other to make partition, which must be by deed; that is to say, all the parties must, by deed, actually convey and assure to each other the several estates which they are to take and enjoy severally and separately. Joint tenants must jointly implead and be jointly impleaded with others. If one joint tenant refuse to join in an action, he may be summoned and severed; but if the person severed die, the writ abates in real actions, but not in personal and mixed actions.

JOLIBA, or DJOLIBA. (See *Niger*.)

JOLLY BOAT. (See *Boat*.)

JOMELLI, Niccolò; a musical composer, born 1714, at Aversa, in the kingdom of Naples. He first studied at Naples, under Feo, and afterwards under Martini at Bologna. At first, he composed ballets—a sort of music then so little esteemed in Italy, that he did not own himself the author of his first comic opera (*L'Errore Amoros*), but gave it to the world under the name of Valentino, a master of not much reputation. This opera, which he composed at the age of 23, probably for the new theatre at Naples, was crowned with great applause, by which he was encouraged to continue his compositions.

In 1738, he wrote his *Odoardo*, for the theatre of Florence, with still greater success, which induced him, in 1740, to go to Rome. He now wrote, from 1740 to 1748, 14 operas for Rome, of which the *Astianatte*, *Ifigenia*, and *Caio Mario*, are particularly worthy of mention, in the latter of which, the beautiful air *Sposo, io vado a morir*, was received with the highest admiration. Besides these, he composed several operas for Venice and other cities. He now received the place of chapel-master in St. Peter's, and composed, besides several *motettes*, the psalm *Benedictus Dominus Deus Israel* (Blessed Lord God of Israel), the music of which is a masterpiece. The duke of Würtemberg then engaged him in his service, and Jomelli went to Stuttgart, where he remained from 1748 to 1765, enjoying the highest distinction, and exercising great influence on German music. When he returned to Italy, John V, king of Portugal, invited him to his court. Although he declined this invitation, he composed a considerable number of operas for the king, and sent him copies of all his subsequent works. He afterwards composed two operas in Rome, both of which were unsuccessful. He then removed to Naples, where he met with no better success; and, August 28, 1774, he died of apoplexy, produced, as is supposed, by chagrin at the success of the German Schuster, and the ill reception of his own operas. His *Requiem* and *Miserere* are particularly celebrated.

JOMINI, Henry, baron; lieutenant-general and aid-de-camp of the late emperor Alexander; a distinguished military writer, born at Payerne (Peterlingen), in the Pays de Vaud, about 1775. He served at first in a French regiment of Swiss, and when it was broken up, August 10, 1792, engaged in mercantile pursuits. On the revolution in Switzerland, he became chief of battalion and secretary-general of the department of war before his 20th year. In these offices, he greatly distinguished himself. In 1803, Jomini connected himself with a mercantile house in Paris; but he devoted all his leisure to his favorite pursuit, the study of tactics. In 1804 was published his *Traité des grandes Opérations militaires*, when Ney appointed him *chef de bataillon* in his own staff. In 1805, he was sent on public business to Napoleon, at Vienna, to whom he presented the two first volumes of his work, which Napoleon received with approbation, and raised the author to the rank of a colonel. Afterwards, as chief of the

staff of marshal Ney, Jomini performed the campaigns of 1806 and 1807, in Prussia and Poland, was made brigadier-general and baron, and followed the marshal to Spain in 1808 and 1809. A misunderstanding with his commander induced him to request permission to resign. It was not granted him; but he retired to Switzerland, was afterwards made major-general, and followed Napoleon as his historiographer, in the grand army which marched against Russia (1812). He continued here, as governor of Smolensk, till Napoleon's defeat. He was present in the campaign of 1813, in Saxony, as chief of the staff of marshal Ney. But, after the declaration of the armistice of Pläswitz, he left the army privately, in Silesia, and, on the 14th August, went over to the allies. Napoleon had refused him the rank of general of a division. Alexander appointed him lieutenant-general and aid. He now bore arms against France. On this account, general Sarrazin reproached him with such bitterness in his history of the war, that Jomini demanded satisfaction. As this was not to be obtained, he printed their correspondence (*Correspondance entre le Général Jomini et le Général Sarrazin, sur la Campagne de 1813*). In 1815, Jomini was in the suite of Alexander at Paris, where he received the cross of St. Louis. His *Traité de grande Tactique* (Paris, 1805, 2 vols., with an atlas), appeared in a 2d edition, under the title *Traité des grandes Opérations militaires, or Relation critique et comparative des Campagnes de Frédéric et de Napoléon* (the 3d edition, 1817, 8 vols., with two atlases). The 7—15 parts contain the *Hist. critique et militaire des Campagnes de la Révolut.* (new edition, Paris, 1824), and extend to 1803. His work is valuable as a history of the war, since it was drawn from the archives of the war department, and other official sources. His account of Frederic's campaigns is borrowed from Lloyd and Tempelhof. The *Tableau de la Campagne d'Automne en Allemagne* (Paris, 1817), is also his work, as is likewise the *Vie politique et militaire de Napoléon* (1827).

JONAH (*Hebrew*, signifying *dove*, and also *the powerful*), one of the minor prophets, son of Amithai, and, according to 2 *Kings*, xiv, 25, a contemporary of Jeroboam II, was born at Gath-Hepher, in Galilee. In the book which bears his name, it is related that he received a command from God, to go and prophesy against Nineveh; but he fled to Joppa, and embarked for Tarshish. The vessel being tossed by a storm, it was

concluded to draw lots, in order to determine who was the cause of the tempest. The lot fell upon Jonah, who was thrown overboard by his own request, because he had been disobedient to God, but was swallowed by a large fish (according to the ancient commentators, a whale; according to moderns, a shark). After he had remained three days and nights in the belly of the fish, the Lord spake unto the fish, and it vomited out Jonah on dry land. He now went to Nineveh, and prophesied its destruction; but, the king and people having repented, Nineveh was spared. Jonah, angry at this, went out of the city, and God made a gourd grow up over him, which was a shade to him. He then sent a worm, which smote the gourd so that it died in one night. Jonah was angry at this also; but God showed him the foolishness of being angry at the destruction of a gourd, and yet demanding the destruction of a city in which were 120,000 innocent children. Jonah's grave is shown at Mosul, the ancient Nineveh, and also at Gath. Some critics maintain that the book was not written by Jonah himself, but is a collection of traditions, made after the destruction of Nineveh. Some writers consider it merely as an allegorical poem. The story of Jonah is also known to the Mohammedans, according to whom, he embarked after his prophecy at Nineveh, and remained 40 days in the belly of the fish. The prayer of the prophet in this situation, is considered one of the most efficacious in the Koran.

JONATHAN, or BROTHER JONATHAN; the nickname given to the Americans of the U. States collectively, by the English, probably on account of the frequency of this name among the early Americans. (See *John Bull*, and *Yankee*.)

JONES, Inigo; the reviver of classical architecture in England, in the beginning of the 17th century. He was a native of London, where his father was a cloth-worker, and was born about 1572. Destined for a mechanical employment, his talents attracted the notice of the earl of Arundel, and of William, earl of Pembroke, the latter of whom supplied him with the means of visiting Italy, for the purpose of studying landscape painting. He went to Venice, where the works of Palladio inspired him with a taste for the art of architecture, in which he rose to great eminence. His reputation procured him the post of first architect to Christian IV, king of Denmark, who, visiting his brother-in-law, James I, in 1606, brought Jones with him to England. He was in-

duced to remain, and was appointed architect to the queen, and subsequently to Henry, prince of Wales. After the death of the prince, he again visited Italy, and remained there some years. During this interval, he extended his knowledge, and improved his taste, from the examination of the models of ancient and modern art. The banqueting house at Whitehall (intended as an adjunct to a magnificent palace) is a monument of his skill and science. At Winchester cathedral, a Gothic building, he erected a screen in the style of classic antiquity. Like his successor, Wren, he seems not to have duly appreciated the peculiar character and distinctive beauties of the pointed style of building, of which so many fine specimens remain in the ecclesiastical structures of the middle ages, in England, France and Germany. He built the front of Wilton-house, in Wiltshire, for Philip, earl of Pembroke, and was much employed by the court and by many of the nobility and gentry, so that he realized a handsome fortune. His talents were often put in requisition for the purpose of designing the scenery and decorations for masques—a species of dramatic entertainment, fashionable in the early part of the 17th century. In these pieces, the dialogues and songs were composed by Ben Jonson, who quarrelled with Jones, and abused him in epigrams and satires. The enmity of the poet was not the only misfortune to which the architect was exposed. Being a Roman Catholic, and a partisan of royalty, he suffered in the civil war, and, in 1646, was forced to pay a fine of £545, as a malignant or cavalier. The ruin of the royal cause, and the death of the king, distressed him greatly; and at length, worn down by sorrow and suffering, he died, July 21, 1652. As an author, he is known by a work relative to that curious monument of former ages, Stonehenge, on Salisbury plain, published after his death, by his son-in-law, Mr. Webb. The object of this treatise, composed by the command of king James I, is to prove that Stonehenge was erected by the Romans, and was a hypæthral temple, dedicated to the god Cælus. A collection of the architectural designs of Inigo Jones was published by Kent, in 1727 and 1744, and others more recently, by Ware and by Leoni.

JONES, sir William, an eminent lawyer and accomplished scholar, was born in London, September 20, 1746. He lost his father when only three years of age, and the care of his education fell on his mother, a lady of uncommon endowments.

At the close of his 7th year, he was placed at Harrow, and, in 1764, he entered University college, Oxford. Here his desire to acquire the Oriental languages induced him to support, at his own expense, a native of Aleppo, to instruct him in the pronunciation of the Arabic language; and as it was soon perceived that he would not misspend his time, the college tutors allowed him to follow his own plans unmolested. His great object was to obtain a fellowship, to spare his mother the expense of his education; but, not succeeding in his wish, he accepted, in 1765, the office of tutor to lord Althorp, afterwards earl Spencer; and, some time after, he obtained a fellowship also. He availed himself of a residence at the German Spa, with his pupil, in 1767, to acquire the German language, and, on his return, translated into French a Persian life of Nadir Shah, brought over in MS. by the king of Denmark, at the request of the under secretary of the duke of Grafton. Another tour to the continent, with his pupil and family, followed, which occupied his time until 1770, when, his tutorship ceasing, he entered himself as a law student in the Temple. He did not, however, wholly sacrifice literature to his professional pursuits; but, on the appearance of the life and works of Zoroaster, by Anquetil du Perron, he vindicated the university of Oxford, which had been attacked by that writer, in an able pamphlet in the French language, which he wrote with great elegance. He also published, in 1772, a small collection of poems, chiefly from the poets of Asia, and was the same year elected a fellow of the royal society. In 1774 appeared his work *De Poesi Asiatica*, containing commentaries on Asiatic poetry in general, with metrical specimens in Latin and English. He was soon after called to the bar, and, in 1776, made a commissioner of bankrupts. About this time, his correspondence with his pupil evinced the manly spirit of constitutional freedom by which he was actuated; and to his feelings on the American contest he gave vent in a spirited Latin ode to liberty. In 1778 appeared his translation of the Orations of Isæus, with a prefatory discourse, notes and commentary, which, for elegance of style, and profound critical and historical research, excited much admiration. In the mean time, he rapidly advanced in professional reputation, although his opinion of the American contest stood in the way of his progress to legal honors. The tumults of 1780 induced him to write a

pamphlet *On the Legal Mode of suppressing Riots*; and, in the following winter, he completed a translation from the Arabic of seven poems, of the highest repute. He also wrote the much admired ode, commencing "What constitutes a state?" These pursuits did not prevent a professional Essay on the Law of Bailments. He distinguished himself, in 1782, among the friends to a reform in parliament, and also became a member of the Society for Constitutional Information. The same year, he drew up a Dialogue between a Farmer and a Country Gentleman, on the Principles of Government; for the publication of which, the dean of St. Asaph, afterwards his brother-in-law, had a bill of indictment preferred against him for sedition. Upon this event, he sent a letter to lord Kenyon, then chief-justice of Chester, owning himself the author, and defending his positions. On the accession of the Shelburne administration, through the influence of lord Ashburton, he obtained, what had long been the object of his ambition, the appointment of judge in the supreme court of judicature, Bengal, to which he was nominated in March, 1783, and knighted. He arrived at Calcutta in September, 1783. Here a new field of action opened to him, and he planned a society in that capital, similar to the royal society of London, of which new institution he was chosen the first president. He then applied himself with ardor to the study of the Sanscrit, and, his health soon suffering from the climate, he took a journey through the district of Benares, during which cessation of public duties, he composed a tale in verse, called the Enchanted Fruit, or the Hindoo Wife, and a Treatise on the Gods of Greece, Italy and India. In 1785, a periodical work, entitled the Asiatic Miscellany, was begun at Calcutta, to which he communicated several poetical compositions of the minor kind; among which were nine hymns, addressed to as many Hindoo deities. He next employed his active mind in planning the compilation of a complete digest of the Hindoo and Mohammedan laws, with a view to the better administration of justice among the natives. This work he did not live to finish, but its subsequent accomplishment was entirely owing to his recommendation and primary labors. His object in this instance was, to secure a due attention to the rights of the natives; and he showed himself equally jealous of those of the British inhabitants, by opposing an attempt to supersede the trial by jury. The publica-

tion of the Asiatic Researches, or memoirs of the society to which he had given birth, also engrossed much of his attention ; and he enriched them himself with a number of curious and interesting papers. In 1789, he gave to the world the translation of an ancient Indian drama, entitled *Sacotala*, or the Fatal Ring. His translation of the Ordinances of Menu, the famous Indian legislator, appeared early in 1794, and is very interesting to the student of ancient manners and opinions. Unhappily, he was seized, in April, 1794, at Calcutta, with an inflammation of the liver, which terminated his life on the 27th of the same month, in the 48th year of his age. Few men have died more respected and regretted than this amiable man and eminent scholar, who, as a linguist, has scarcely ever been surpassed. His acquaintance with the history, philosophy, laws, religion, science and manners of nations, was most extensive and profound. As a poet, too, he would probably have risen to great eminence, if his ardor to transplant foreign beauties, and his professional and multifarious pursuits, had allowed him to cultivate his own invention with sufficient intensity. His private character was estimable in all the domestic relations, and he was equally liberal and spirited in public life. The memory of sir William Jones received many testimonies of respect, both in England and India. The directors of the East India company voted him a monument in St. Paul's cathedral, and a statue in Bengal ; but the most effectual monument of his fame was raised by his widow, who published a splendid edition of his works, in 6 vols. 4to, 1799, and also, at her own expense, placed a fine marble statue of him, executed by Flaxman, in the anti-chamber of University college, Oxford.

JONES, John Paul, was born at Arbingland, in Scotland, July 6, 1747. His father was a gardener, whose name was *Paul* ; but the son assumed that of *Jones* in subsequent life, for what reason is not known. Young Paul early evinced a decided predilection for the sea, and, at the age of 12, was bound apprentice to a respectable merchant of Whitehaven, in the American trade. His first voyage was to America, where his elder brother was established as a planter. He was then engaged for some time in the slave-trade, but quitted it in disgust, and returned to Scotland, in 1768, as passenger in a vessel, the captain and mate of which died on the passage. Jones assumed the command, at the request of those on board,

and brought the vessel safe into port. For this service, he was appointed by the owners master and supercargo. While in command of this vessel, he punished a sailor who afterwards died of a fever at the island of Tobago—a circumstance which gave rise to an accusation against Jones, of having caused his death, by the severity of the punishment upon him ; but this has been completely refuted. Jones was afterwards in command of the *Betsy*, of London, and remained some time in the West Indies, engaged in commercial pursuits and speculations, by which it is said he realized a handsome fortune. In 1773, he was residing in Virginia, arranging the affairs of his brother, who had died intestate and childless, and about this time took the name of *Jones*. In Virginia he continued to live until the commencement of the struggle between the colonies and mother country. He offered his services to the former, and was appointed first of the first lieutenants, and designated to the *Alfred*, on board of which ship, to use his own language in one of his letters, " he had the honor to hoist, with his own hands, the flag of freedom, the first time it was displayed on the Delaware." Soon after this, we find Jones in command of the *Providence*, mounting 12 four-pounders, with a complement of 70 men, cruising from the Bermudas to the Gut of Canso, and making 16 prizes in little more than six weeks. In May, 1777, he was ordered to proceed to France, where the American commissioners, Franklin, Deane and Lee, were directed to invest him with the command of a fine ship, as a reward of his signal services. On his arrival in France, he was immediately summoned to Paris by the commissioners. The object of this summons was to concert a plan of operations for the force preparing to act against the British in the West Indies, and on the coast of America. This plan, which certainly did great honor to the projector, though untoward delays and accidents prevented its immediate success, was afterwards openly claimed by Jones as his own, without acknowledging the assistance or participation of the American commissioners or the French ministry. The *Ranger* was then placed under his orders, with discretion to cruise where he pleased, with this restriction, however, that he was not to return to France immediately after making attempts upon the coast of England, as the French government had not yet declared itself openly as the ally of the U. States. April 10, 1778, he sailed on a cruise, during which he laid

open the weakness of the British coast. With a single ship, he kept the whole coast of Scotland, and part of that of England, for some time, in a state of alarm, and made a descent at Whitehaven, where he surprised and took two forts, with 30 pieces of cannon, and set fire to the shipping. In this attack upon Whitehaven, the house of the earl of Selkirk, in whose service the father of Jones had been gardener, was plundered, and the family plate carried off. But the act was committed without his knowledge, and he afterwards made the best atonement in his power. After his return to Brest with 200 prisoners of war, he became involved in a variety of troubles, for want of means to support them, pay his crew, and refit his ship. After many delays and vexations, Jones sailed from the road of St. Croix, August 14, 1779, with a squadron of seven sail, designing to annoy the coasts of England and Scotland. The principal occurrence of this cruise was the capture of the British ship of war *Serapis*, after a bloody and desperate engagement, off Flamborough head, Sept. 23, 1779. The *Serapis* was a vessel much superior in force to Jones's vessel, the *Bon Homme Richard*, which sunk not long after the termination of the engagement. The sensation produced by this battle was unexampled, and raised the fame of Jones to its acme. In a letter to him, Franklin says, "For some days after the arrival of your express, scarce any thing was talked of at Paris and Versailles, but your cool conduct and persevering bravery during that terrible conflict. You may believe that the impression on my mind was not less strong than on that of the others. But I do not choose to say, in a letter to yourself, all I think on such an occasion." His reception at Paris, whither he went on the invitation of Franklin, was of the most flattering kind. He was every where caressed; the king presented him with a gold sword, bearing the inscription, *Vindicati maris Ludovicus XVI remuneratur strenuo vindici*, and requested permission of congress to invest him with the military order of merit—an honor never conferred on any one before who had not borne arms under the commission of France. In 1781, Jones sailed for the U. States, and arrived in Philadelphia February 18 of that year, after a variety of escapes and encounters, where he underwent a sort of examination before the board of admiralty, which resulted greatly to his honor. The board gave it as their opinion, "that the conduct of Paul Jones

merits particular attention, and some distinguished mark of approbation from congress." Congress passed a resolution, highly complimentary to his "zeal, prudence and intrepidity." General Washington wrote him a letter of congratulation, and he was afterwards voted a gold medal by congress. From Philadelphia he went to Portsmouth, New Hampshire, to superintend the building of a ship of war, and, while there, drew up some admirable observations on the subject of the American navy. By permission of congress, he subsequently went on board the French fleet, where he remained until the conclusion of peace, which put a period to his naval career in the service of the U. States. He then went to Paris, as agent for prize-money, and, while there, joined in a plan to establish a fur-trade between the north-west coast of America and China, in conjunction with a kindred spirit, the celebrated John Ledyard. In Paris, he continued to be treated with the greatest distinction. He afterwards was invited into the Russian service, with the rank of rear-admiral, where he was disappointed in not receiving the command of the fleet acting against the Turks in the Black sea. He found fault with the conduct of the prince of Nassau, the admiral; became restless and impatient; was intrigued against at court, and calumniated by his enemies; and had permission, from the empress Catharine, to retire from the service with a pension, which was never paid. He returned to Paris, where he gradually sunk into poverty, neglect, and ill health, until his death, which was occasioned by jaundice and dropsy, July 18, 1792. His last public act was heading a deputation of Americans, who appeared before the national assembly to offer their congratulations on the glorious and salutary reform of their government. This was before the flight of the king.—Jones was a man of signal talent and courage; he conducted all his operations with the most daring boldness, combined with the keenest sagacity in calculating the chances of success and the consequences of defeat. He was, however, of an irritable, impetuous disposition, which rendered him impatient of the authority of his superiors, while he was, at the same time, harsh in the exercise of his own; and he was deficient in that modesty which adorns great qualities and distinguished actions, while it disarms envy and conciliates jealousy. His early education was of a very limited kind. It terminated when he went to sea, at the age of twelve;

but he supplied its defects by subsequent study, so as to enable himself to write with fluency, strength and clearness, and to sustain his part respectably in the polished society into which he was thrown. In his letters, he inculcates the necessity of knowledge for naval officers, and intimates that he had devoted "midnight studies" to the attainment of that information which he deemed requisite in his situation. His memorials, correspondence, &c. are quite voluminous. He also wrote poetry, and, in Paris, was a great pretender to *ton*, as a man of fashion, especially after his victory over the Serapis, which, of course, gave him great *eclat* amongst the ladies of the French capital. At this period, he is described by an English lady then resident at Paris, as "a smart little man of thirty-six; speaks but little French, and appears to be an extraordinary genius, a poet as well as a hero." An account of his life has been written by J. H. Sherburne (Washington, 1828).

JONES, John, an American physician, was born at Jamaica, Long Island, in 1729. After receiving his education at a private school in the city of New York, he commenced the study of medicine, under doctor Thomas Cadwalader, and afterwards visited Europe, to improve his professional knowledge. He obtained the degree of doctor of medicine from the university of Rheims, and, having subsequently spent some time at Leyden, concluded his medical tour by a visit to Edinburgh. Returning to America, doctor Jones settled in New York, where he was speedily introduced to an extensive practice, and acquired particular reputation as an operator. When medical schools were instituted in the college of New York, doctor Jones was appointed professor of surgery, upon which branch he delivered several courses of lectures, diffusing a taste for it among the students, and explaining improvements as practised in Europe, of which the American faculty were hitherto ignorant. Having for a considerable time been afflicted with the asthma, he embarked for London, where he experienced some alleviation of his complaint. He returned to his native country at a crisis when she required the exertions of all her citizens. In the year 1775, he published his *Plain Remarks upon Wounds and Fractures*—a work particularly useful to the country at that period. Many persons had been of necessity chosen to act as surgeons in the continental army, who were ignorant of the recent improvements in the profession.

and found in this work a valuable assistant. When the British troops took possession of New York, doctor Jones, notwithstanding the assurances of protection from the royal commander, retired into the country, relinquishing his lucrative practice in the city. He was soon after chosen to a seat in the senate of New York, and subsequently entered the medical department of the army. The hardships of a military life injured his delicate health, and obliged him to abandon the service, for his private practice. Having fixed his permanent residence at Philadelphia, he was elected, in 1780, one of the physicians of the Pennsylvania hospital. Upon the institution of the college of physicians of Philadelphia, in 1787, doctor Jones was elected vice-president, and contributed to the first volume of its transactions an interesting paper on *Anthrax*. He was the intimate friend and physician of doctor Franklin, whom he attended in his last illness, and published a brief account of his death. In 1790, he attended general Washington, then president of the U. States, when very ill at New York. When the seat of the federal government was removed to Philadelphia, the president appointed doctor Jones physician to his family. In June, 1791, he contracted a fever, which, added to his previous disorder, put a period to his life on the 23d of that month, in the 63d year of his age.

JONGLEURS. (See *Jugglers*.)

JONSON, Benjamin, a celebrated English poet, the contemporary and friend of Shakspeare, whom he has been accused by some, but on insufficient grounds, of regarding with envious and malignant feelings. He was the posthumous son of a clergyman, who had suffered considerable privations for his religious opinions, and was born June 11, 1574, at Westminster; at the grammar-school of which city he was placed, under Camden, at an early age; till his mother marrying again to a person who held the humble occupation of a bricklayer, young Ben, as he was familiarly called, was taken home abruptly by his father-in-law, and employed by him as an assistant in his trade. The ardent spirit of the future poet revolted against his condition; he fled from home, and entered the army as a private soldier, in which capacity he served with much commendation from his officers on the score of personal courage, during a campaign in Holland. Returning to England, he quitted the service, and, although his straitened circumstances threw in his way

obstacles of no common magnitude, he determined to apply himself to literary pursuits. With this view, he contrived to enter himself of St. John's college, Cambridge; but his failing resources prohibited him from continuing long at the university. He went to London, and commenced at once author and actor by profession—two callings then frequently combined. His progress as a performer was not rapid, and, before he could make any great impression in his favor, a quarrel with a brother actor seemed to close every avenue against this method of gaining a reputation. He had made his *début* at the Curtain, an obscure theatre on the skirts of the town, and, a difference arising between him and another member of the company, a duel ensued, which terminated in the death of his antagonist, while he himself received a wound in the sword-arm. He was seized and imprisoned, and narrowly escaped with life, in consequence of this rencounter. During his confinement, he is reported to have become, through the intervention of a Roman Catholic priest, a convert to that communion, and to have remained so during a space of twelve years, when he resumed his former opinions. His first attempt at dramatic composition, in the prosecution of which he is said to have been much encouraged, if not actually prompted, by Shakspeare, was in 1598, when his *Every Man in his Humor*, still considered a standard piece, was printed; and from this period, he seems to have produced a play annually for several years, besides writing, occasionally, masks and interludes, for the entertainment of the court. The favor he had enjoyed there, was not, however, sufficient to protect him from the consequences of a severe and imprudent satire on the Scottish nation, in a dramatic piece, which he wrote in conjunction with Marston and Chapman, entitled *Eastward Hoe*. The anger of the court favorites was at once drawn upon his head by this unfortunate sally; he was a second time committed to prison, and only a timely submission saved his nose and ears, which he was condemned to lose in the pillory as a libeller. By his address, however, he soon contrived to reinstate himself in the favor of a monarch to whose pleasures the effusions of his muse had become necessary; and for the remainder of that reign he continued in high favor as a kind of superintendent of the court revels, enjoying, at the same time, the friendship of all the wits and literati of the age. After a tour through

France, in 1613, in the progress of which, with his usual carelessness, he affronted cardinal Du Perron, he returned to England, and afterwards obtained the honorary degree of A. M. from the university of Oxford. On the death of the poet laureate, Jonson was appointed his successor, and the salary of 100 marks, attached to that post, was, on his petition, raised to the sum of £100 by Charles I. But neither this addition to his income, nor a subsequent gratuity from the same royal source, could save him from the consequences of pecuniary improvidence. An attack of palsy at length carried him off, Aug. 16, 1637. Jonson's best dramas are his *Alchymist*, *Epicene*, and *Volpone*, which, besides being admirable as to plot and developement, exhibit traits of pungent humor, strong conception, and powerful discrimination. The remainder of his dramas are inferior. His tragedies of *Sejanus* and *Catiline* are too learned and declamatory either for the closet or the stage, and a great portion of his comedy is low, forced and unnatural. Contrary to Shakspeare, he deals rather in passing manners and eccentricities than in general nature, but supplies a good notion of the follies of his times. His poetry is occasionally illuminated by vigorous and pleasing passages, and a few of his short pieces, poems, and, especially, the *Hymn from Cynthia's Revels*, his epitaph on the countess of Pembroke, and some of his songs and *Underwoods* are excellent. Besides his dramatic and poetical productions, he was the author of a variety of miscellaneous works, among which are an *English Grammar*, *Discoveries*, &c. Several editions of his works have been published, the last and most complete of which is that by Mr. Gifford. A curious tradition prevailed with respect to the deposition of his remains in Westminster abbey, where a handsome tablet has been erected to his memory, in Poet's corner, inscribed *O rare Ben Jonson!* The same words are found on several small square stones in the floor of the abbey, under one of which it was generally believed his corpse was buried in a perpendicular position. This was ascertained a few years since to be the fact, his coffin being discovered so situated in one of the aisles during the preparations making for a recent interment.

JOPPA. (See *Jaffa*.)

JORDAN. This river, celebrated in Scripture history, rises at the foot of the Antilibanus in Syria (in the pachalic of Damascus), forms the lake Genezareth or

Tiberias, traverses Palestine, of which it is the only important river, from north to south, receives the Kedron, and, after a course of about 150 miles, empties into the Dead sea. The banks are steep, and about 15 feet high. Its borders, once cultivated and inhabited, are now deserted, and its yellow water rolls slowly in the sand. The Hebrews called it *Jordan* (river of judgment); the Arabs call it *Nahar-el-Chiria* (river of the ford). They ascribe to bathing in its waters the power of healing.—On the countries near the Jordan and eastward, see J. S. Buckingham's *Travels among the Arab Tribes inhabiting the Countries east of Syria and Palestine* (London, 1825, 4to.).

JORDAN, Dorothea; an English actress of eminence in various departments of the drama. Her father, captain Bland, of a respectable Irish family, eloped with her mother, who was a native of Wales, by whom he had a numerous offspring. The subject of this article adopted the theatrical profession, for the support of herself and her mother, and made her first appearance at Dublin, in the character of Phebe, in *As you Like it*; but her talents first attracted particular attention in tragedy. At the theatre of York, she assumed the name of *Mrs. Jordan*, by which, though never married, she was subsequently known. In this situation, she continued three years. She made her first appearance before a London audience, as Peggy, in the *Country Girl*; and, in that character, in *Nell*, in the *Devil to Pay*, and others of a similar cast, she displayed unrivalled excellence. She appeared to almost equal advantage as a tragic actress, where tender rather than violent and lofty feelings were to be portrayed. Her long theatrical career was terminated by her retirement to France, where she resided in obscurity, and died (1816) without a relative or friend near her, to soothe the hours of sickness, or bestow on her remains the decent rites of sepulture. She was, for a long time, the mistress of the duke of Clarence, now William IV, who had several children by her. Since his accession, the king has ordered Chantry to prepare a statue, to be placed over her remains, in the cemetery of St. Cloud.

JORDANO. (See *Giordano*.)

JORNANDES (properly *Jordanes*), by birth an Alan, lived under the emperor Justinian, was at first a notary, and afterwards took the monastic vows, but is erroneously styled *bishop of Ravenna*. His *De Gothorum Origine et Rebus Gestis*, and his

chronicle *De Regnorum et Temporum Successione*, which come down to the year 552, are of much value, though written in barbarous Latin. They are contained in Muratori's *Script. Rerum Italicarum*.

JORTIN, John, D. D., an eminent scholar and divine, was born in London, in 1698, and was educated at Cambridge. Here, under the instruction of doctor Thirlby, he acquired so high a character for learning and acuteness, that he was recommended by his tutor to Pope, to extract the notes from Eustathius, to print with his translation of the *Iliad*. He took orders in 1724, and he served a chapel of ease to the parish of St. Giles in the Fields. In 1731, in conjunction with some learned coadjutors, he gave to the world *Miscellaneous Observations upon Authors, Ancient and Modern* (two volumes, 8vo.); and, in 1751, appeared the first volume of his *Remarks upon Ecclesiastical History*, of which four volumes more were published in 1752 and 1754, and two more after his death in 1773. In 1755, he published *Six Dissertations upon various Subjects*. In 1758, he published his *Life of Erasmus* (4to.); in 1760, another 4to. volume, entitled *Remarks upon the Works of Erasmus*. In 1762, he received the living of Kensington, the duties of which he performed for the remainder of his life. In 1764, he was made archdeacon of London, and died Aug. 27, 1770. Besides the works already mentioned, doctor Jortin was the author of *Remarks upon Spenser* (1734, 8vo.); *Remarks on Seneca*; *Letters on the Music of the Ancients*; and other miscellaneous productions, which appear in two volumes of *Tracts, Philological, Critical and Miscellaneous*. Seven volumes of his *Sermons and Charges* were also published after his death, in 1771 and 1772.

JORULLO, **JURULLO**, or **JURUYO**, or **XURULLO**; a volcano of Mexico, in Mechoacan, 30 miles south Pasquaro, 65 south-south-west Valladolid; lon. 103° 5½ W.; lat. 19° 9' N. This volcano was formed on St. Michael's day, in 1759, in the middle of a beautiful, fertile and pleasant valley, which extends three leagues from east to west, and more than 8 from north to south. By the skirt of this mountain passes a stream, which before fertilized the valley, and which is called *del Salto*. The waters are so hot that men or horses passing through it are in danger of being scalded.

JOSEFINOS. (See *Afrancesados*, and *Joseph Bonaparte*.)

JOSEPH, St.; husband of the virgin

Mary, the mother of Jesus, a Jew of the tribe of Judah, whose genealogy from Abraham and David is given by St. Matthew and St. Luke. He is represented in the New Testament as an humble mechanic, and a just man; but little is known, with certainty, of his history.

JOSEPH, the son of the favorite Rachel, was tenderly beloved by his father Jacob. Stung with envy and with the arrogance which they thought was displayed in his innocent dreams, his brothers sold him to some Ishmaelitic slave-dealers, by whom he was sold to Potiphar, a distinguished officer in Egypt. The prudence and fidelity which he displayed in the service of his master ameliorated his condition; but his refusal to comply with the unlawful desires of Potiphar's wife caused him to be thrown into prison, at her instigation. Yet, even here, Joseph was able to gain the confidence of the keeper; and the interpretation which he gave to a dream of the king's butler, who was likewise in prison, opened for him the way to a better fortune; for, after the butler had been restored to favor, Pharaoh and his whole court were troubled by a dream. The butler remembered the Hebrew boy, who had given so happy an interpretation to his own dream when in prison. Joseph was brought to court, and explained the king's dream of seven fat and seven lean kine. The monarch now released him from confinement, and raised him to the second place in the empire. He suggested wise measures for preserving the people from famine, during the unproductive years which he had predicted, and Pharaoh committed to him the charge of carrying them into execution. Married to the daughter of an Egyptian nobleman, in possession of the highest power next to the royal, Joseph saw all his wishes gratified, except his yearning after his relations. In the years of famine, his brothers came to buy corn from the stores which he had collected in Egypt. Without making himself known to them, he endeavored, by some harsh treatment, to discover their thoughts, and to make them repent of the wrong which they had done him. His feelings at length overcame him. He disclosed himself to his brethren, and provided them and his father with lands in Egypt. He was now their benefactor, and therefore Jacob, in his last blessing, gave to his two sons equal rights with the other brothers, and the two tribes of Manasseh and Ephraim preserved the memory of Joseph among the Hebrews.

JOSEPH I, emperor of Germany, son of

Leopold I, born at Vienna, July 26, 1678, received the crown of Hungary in 1689, and was soon after crowned as Roman king. In 1705, he began his reign, which, though short, was troubled by wars in the Netherlands, Hungary, Germany, Italy and Spain. He was well disposed, but weak and indolent. He revived the imperial chamber. The Protestants enjoyed toleration and some privileges under his reign. He died April 17, 1711.

JOSEPH II, German emperor, son of Francis I and Maria Theresa, was born March 13, 1741, at a time when Frederic the Great had already conquered half of Silesia, and the Bavarian army was approaching the Austrian frontiers, when the peace of Aix-la-Chapelle restored the sinking state. Joseph was inferior to his brother (Leopold II) in learning, but he displayed an active and penetrating mind, and made much progress, particularly in the languages, mathematics and music. His lively temperament often brought him into collision with his mother, whom he obeyed from respect, but without conviction, and with secret reluctance. He observed how much her devotional spirit was abused, and he imbibed an invincible aversion to the clergy. She set a great value on birth, and he early acquired a dislike for undeserved privileges. In the mean time, the seven years' war having broken out, every preparation was made for the young prince joining the army, when Maria Theresa recalled her order. In 1760, he married Elizabeth of Parma, who died on her second confinement. He also lost his second wife, a Bavarian princess. He was elected king of the Romans in 1764, and, on the death of his father, 1765, German emperor. His mother declared him co-regent in the hereditary states of the house of Austria, and gave him the command of the army; but the real authority remained in her hands. During the war, Joseph had had cause to admire the great enemy of his house. Animated by this example, he entered on his elevated career; but, as he had but little real power, excepting in military affairs, in which, with the aid of Lascy, he introduced some improvements, he employed this time in travelling, and becoming acquainted with his states. On one of these journeys, under the title of *count Falkenstein*, he visited Frederic the Great in his camp at Neisse, Aug. 25, 1768. The two monarchs, dispensing with ceremonies, met on terms of familiarity, like friends. In the following year, the emperor, in his camp, received a visit from Frederic. In 1777, Joseph

made a journey to Paris, where he spent six weeks. Every body was charmed with him. At the end of this year, the elector of Bavaria died, and the war of the Bavarian succession broke out between Prussia and Austria, to which Maria Theresa put an end, without the knowledge and contrary to the wishes of her son, who was desirous of measuring himself in the field with his great adversary. In 1780, Joseph came into the possession of full dominion over his hereditary states, at the age of 40 years, and was thus the sovereign of more than 22 millions of men, with a fine army. His people adored him; the nobility and clergy alone had reason to fear him. Joseph had drawn on himself their hatred, by ordinances which were, in many respects, very excellent. He allowed a greater freedom of the press, put an end to the connexion between Rome and the religious orders, diminished the pensions, placed the Jews on a better footing, abolished bondage, suppressed all nunneries and many monasteries, particularly those in which there were no schools, or the sick were not taken care of, or the monks did not preach. In the spring of 1782, pope Pius VI made a visit to Vienna. Joseph afterwards returned his visit at Rome, still continuing to suppress monasteries, so that in eight years, the number belonging to the different orders had sunk from 63,000 to 27,000. All branches of the government, public education, the police, the state of the clergy, and the peasantry, were reformed. By a new code of laws, capital punishments were abolished. His attempts at reform in Hungary, which he wished to render uniform with his German states, caused a rebellion of the Walachians, which he could quell only by the execution of its leaders, Horia and Gloska. Then followed, 1784, the dispute with Holland, concerning the free navigation of the Scheldt, and the negotiations for the exchange of the Netherlands for Bavaria, against which the confederacy of the German princes was formed, in 1785. In 1787, under the title of *count Falkenstein*, Joseph made a journey into the Crimea, where Catharine gave him a most splendid reception at Cherson. After his return, he experienced a series of misfortunes. Disturbances having broken out in the Netherlands, Joseph discontinued his reforms, and quiet seemed to be restored. Feb. 9, 1788, he declared war against the Turks. By the defeat at Lugos (Sept. 20, 1788), the army was obliged to retreat, and suffered dreadfully in consequence of the heat and the unhealthi-

ness of the country. Joseph himself, exhausted and chagrined by the misfortune of his army, returned sick to Vienna in December. In the following year, fortune favored the Austrian arms; Belgrade was surrendered to Laudohn, and the Russians made great progress. The principal cause of the difficulties which Joseph next had to encounter, was the tax law, introduced in November, 1789. The nobility and peasantry showed themselves equally dissatisfied, and the signal was given for general disorder and open rebellion. The Netherlands declared themselves independent, and expelled the imperial forces from all the provinces, and Luxemburg only remained in the possession of the imperial troops. Joseph showed himself ready to make concessions; but all his proposals were scornfully rejected. The Hungarians, also, whose general dissatisfaction had been only slumbering, rebelled, and demanded the restoration of their ancient rights and constitution. To the astonishment of all Europe, Joseph, in January, 1790, declared all the acts of his government in that country revoked, even to the edict of toleration (June 22, 1781). Tyrol showed signs of dissatisfaction, and Joseph hastened to put every thing on its former footing. His health sunk under these accumulated mortifications, and the consequences soon became apparent. February, 1790, he was sensible that death was rapidly approaching, and, on the 20th, he died of a pulmonary consumption.—Joseph was of the middle size; of a lively disposition, fickle, and fond of action, of ruling, of destroying and building up. Courage in danger was a striking trait in his character. He had a strong and lively sense of the dignity of man, and respected it in all. He caused the Augarten, hitherto closed, to be made public, and placed over the entrance the inscription, "Dedicated to all men, by one who values them." When requested to permit only certain classes to walk in the Prater, in order that they might enjoy themselves there with their equals only, he refused, and added, "If I would live only with my equals, I must go to the tomb of the emperors, at the capuchin chapel, and there spend my days." To Schmidt, the historian of Germany, he said, "Spare no one, and not even myself, if you come down so far with your history. Posterity must judge my faults, and those of my predecessors." Frederic the Great wrote to Voltaire concerning him—"Joseph is an emperor such as Germany has not had for a long time. Educated in splendor,

his habits are simple; grown up amidst flattery, he is still modest; inflamed with a love of glory, he yet sacrifices his ambition to his duty." Joseph's favorite object was to be sovereign in a peculiar sense, and to manage the great machine of the state entirely himself. Whatever his own reflections, or his knowledge of other countries, showed to be useful, he wished to introduce. But he did not sufficiently consider that he had to do with other men, with other relations, and that long habit rendered it difficult to change, at once, usages sanctified by time; that other men did not possess his knowledge and experience. The present emperor of Austria, Francis I, his nephew, has caused a monument to be erected to him by Zauner.—See *Anecdotes of the Emperor Joseph II*, and Pezzi's *Charakteristik* (Vienna, 1790). Dohm's *Memoirs* also contain important information on Joseph's system of government and reform. The *Letters of Joseph II* (Leipsic, second edition, 1822) are valuable.

JOSEPH BONAPARTE. (See *Appendix* to this volume.)

JOSÉPHINE (*Rose-Tascher de la Pagerie*), empress of the French, queen of Italy, was born in Martinique, June 24, 1763. While very young, her father took her to France, to marry her to the viscount Beauharnais (q. v.),—a marriage arranged by the two families, when the marquis Beauharnais was governor-general of the Antilles. Madame De Beauharnais, in the prime of her beauty, and still more adorned by that peculiar grace which distinguished her throughout her life, had what was then called great success at court. She bore the viscount two children, Eugène (q. v.) and Hortense; but neither the brilliant life of the court, nor her love for her children, had been able to lessen her filial attachment to her mother, to attend whom, in her sickness, she went to Martinique, in 1787. She took her daughter with her, and passed three years in the island. The troubles which then broke out very suddenly, obliged her to flee without taking leave of her mother, and to return to France, where she arrived after narrowly escaping great perils. A singular prophecy had been made to her when a child, which she used to mention when it was apparently fulfilled in her high destiny. She is said frequently to have indulged in this play of divination. Her husband was known, in the beginning of the revolution, as an advocate of constitutional principles, and his standing, as well as the benevolence of his wife, natu-

rally made their house a kind of asylum for the unfortunate. Mlle. De Béhisy, condemned by the revolutionary tribunal, owed her life to the courageous intercession of Mad. De Beauharnais. But the fury of terrorism increased, and her husband, who had valiantly defended France, at the head of its armies, was thrown into prison, and executed. She was also included in the list of proscription; but the death of her husband reduced her to such a state that she could not be removed, and to this circumstance she owed her escape from execution. Robespierre at length perished, and the viscountess was delivered from prison by Tallien, who was never forgotten by her, nor by Eugène, from whom he received a considerable pension till his death. Joséphine was indebted to Barras for the restoration of a part of the property of her husband, and at his house, after the 13th Vendémiaire, she met general Bonaparte, who had previously taken an interest in her for the following reason: The disarming of the citizens having been decreed, a boy of fifteen years presented himself to Bonaparte, and with great earnestness demanded the sword of his father. The boy was Eugène; and Bonaparte, touched by his filial zeal, was desirous to become acquainted with his mother, to whom he immediately became attached. He married her in 1796, and never ceased to have the greatest esteem for her. She followed the hero of Italy, and her whole life was now intimately connected with that of Napoleon, at whose side she stood, like a good genius. She had considerable influence over him, and his letters to her are proofs of her amiable character, and of his warm attachment to her. She was always benevolent, and accessible to any who sought protection or mercy from Napoleon through her. The comparison which Napoleon drew, at St. Helena, between the two empresses, as recorded in Las Cases' Memorial, is honorable to both. Bourrienne tells us, that some shameful calumnies rendered general Bonaparte jealous while in Egypt, but that, soon after his return, every thing was adjusted. Joséphine used her influence in favor of many emigrants, encouraged arts and industry, and protected the humblest artists whom she found worthy. "If I," said Napoleon, "win battles, you win hearts;" and it certainly seems as if Napoleon could not have found a woman who united all the qualities of heart and mind, which would fit her for the companion of his career, in a greater degree than Joséphine. Polignac and Rivière owed their lives to her. Her

court was no less admired in France than she herself was beloved. She loved pomp. When Napoleon ascended the throne, a divorce was proposed, but the emperor rejected the proposition. Joséphine was crowned at Paris and at Milan. When Napoleon became desirous of marrying a princess, she felt it deeply, yet she had firmness enough to consent to what he thought best for France and for himself. She retired to her beautiful seat of Malmaison, with the title *impératrice-reine-douairière* (empress-queen-dowager), where the respect and the love of all the French followed her, who was called *l'étoile de Napoléon*. She was doomed to see the destruction of that throne on which she had once sat. The emperor Alexander and the king of Prussia, but particularly the former, showed their respect for her virtues by repeated visits to Malmaison; but the fate of Napoleon undermined her strength, and, having exposed herself while in a feeble state of health, by walking with Alexander, she took a cold, and died in the arms of her children, May 29, 1814. Her last words were *L'île d'Elbe!*—*Napoléon!* Her body was deposited in the church of Ruel, and was followed by a numerous procession, in which the emperor Alexander was represented by general Sacken. Seven years afterwards, her children received permission to erect a monument to her, who had so long been called the guardian angel of France. Joséphine was handsome; her figure was elegant and majestic; but her greatest charms were her grace and goodness of heart. The *Mémoires Historiques et Secrets de l'Impératrice Joséphine* (2 vols., published in November, 1820, by the famous Parisian sibyl, Mlle. Le Normand) contain many interesting, though unauthenticated anecdotes, respecting the life of this remarkable woman.

JOSEPHUS, Flavius, born 37 years after Christ, at Jerusalem, of the order of the priesthood, was an ornament to the sect of the Pharisees, to which he belonged, and for a long while governed Galilee. He afterwards obtained the command of the Jewish army, and supported with courage, with wisdom and resolution, a siege of seven weeks, in the fortified town of Jotapha, where he was attacked by Vespasian and Titus. The town was betrayed to the enemy: 40,000 of the inhabitants were cut to pieces, and 1200 were made prisoners. Josephus was discovered in a cave, where he had concealed himself, and was given up to the Roman general, who was about to send him to

Nero, when, as it is related, he predicted that Vespasian would one day enjoy the imperial dignity, and thereupon had the good fortune to obtain both freedom and favor. This induced him, when he went with Titus to Jerusalem, to advise his countrymen to submission. After the conquest of Jerusalem, he went with Titus to Rome, and wrote the history of the Jewish war, of which he had been an eye-witness, in seven books, both in the Hebrew and Greek languages—a work which resembles the writings of Livy more than any other history. His Jewish antiquities (in 20 books) is likewise an excellent work. It contains the history of the Jews, from the earliest times till near the end of the reign of Nero; but it is censured, as giving an incorrect account of the miracles of Christ, and as suppressing or altering every thing which might have given offence to the heathen. As a wise politician, he made the predictions of a Messiah refer to Vespasian. His two books on the Antiquity of the Jewish People contain valuable extracts from old historians, and are aimed at Apion, an Alexandrian grammarian, and an open adversary of the Jews. The best edition of his works is that of Havercamp (Amsterdam, 1729, in two volumes, folio, Greek and Latin). The last edition is by Oberthür (Leipzig, 1781—85).

JOSQUIN DE PREZ, Adrian, JOSQUINUS, or JODOCUS DE PRATO; one of the greatest musical masters of the Netherlands, who received the surname *Prato* from his residence during several years at Prato in Tuscany. He was a pupil of John Okenhein, called the *Sebastian Bach* of his time. After having studied with Okenhein, Josquin went to Italy, received an appointment, in 1475, in the papal chapel, and acquired so much reputation by his *motettes*, masses, and other church compositions, that he was invited to Cambrai, made chapel-master to Louis XII and Francis I, and then to the German emperor Maximilian I. He died at Brussels, where his tomb is shown in the church of St. Gudala. He was justly admired as a contrapuntist, a hundred years before Palestrina and Orlando. "Josquin," said Luther, after having heard one of his masses, "is master of the notes: they must do as he chooses: other composers must do as the notes choose." The celebrated Senfèl and Nicolas Gombert were his pupils. (See Burney's *History of Music*, or the article *Josquin*, in Rees's *Cyclopaedia*.)

JOUJOU (*French*, which, literally translated, would be *play-play*); a plaything, con-

sisting of two thin circular plates of wood, about two inches in diameter, united in the centre by a cylinder one sixth of an inch long. Fixed to the cylinder is a cord about a yard long or more, which is fastened with a noose to the finger. If the cord is wound round the cylinder, and the *joujou* is let fall, you can, by a pull before the whole cord is wound off, make the *joujou* wind itself up entirely. In this the whole play consists, and yet, from 1790 to 1794, the *joujou* was so fashionable in France, that the highest persons were seen playing with it on their walks, and in society. The fashion also extended to Germany.

JOURDAN, Jean Baptiste, count, marshal and peer of France, born in 1762, at Limoges, where his father practised as a surgeon, entered the military service in 1778, and fought in America. After the peace, he employed himself in commerce. In 1790, he took service in the national guard: in 1791, he commanded a battalion of volunteers in the army of the North: in May, 1793, he was appointed general of brigade, and, two months after, general of division. In the battle of Hondsehoote, he mounted the enemy's works, at the head of his troops, and afterwards received the command of the army, in the place of Houchard. Oct. 17, he gained, after a struggle of 48 hours, the battle of Watignies over the prince of Coburg; but, because he disobeyed the directions of the committee of safety, to act immediately on the offensive with newly levied and undisciplined troops, Pichegru received the chief command in his place. Jourdan, however, soon after received the command of the army of the Moselle, in the place of Hoche. He opened the campaign by the victory of Arlon. He afterwards effected the junction of his troops with the right wing of the army of the North, passed the Sambre, besieged Charleroi, and gained, June, 1794, the victory of Fleurus, by which he became master of Belgium, and drove the allies beyond the Rhine. We can thus regard Jourdan as the conqueror of Belgium, and of the left bank of the Rhine. In September, 1795, he crossed the Rhine at Bonn, Neuwied and Düsseldorf, while Pichegru did the same thing at Manheim. He could not, however, maintain his station on the right bank. He afterwards took the place of Pichegru, and undertook, in 1796, the celebrated invasion of the right bank of the Rhine, in which he conquered Franconia, and pressed forward towards Bohemia and Ratisbon. But the arch-duke Charles defeated him, and his retreat to-

wards the Rhine became at last a disorderly flight; whereupon Beurnonville took the command. Jourdan retired to Limoges as a private individual. In March, 1797, he was chosen a member of the council of five hundred, and was twice their president. He remained a firm friend to the republic. Here, too, he was in opposition to his rival Pichegru. In the events of the 18th Fructidor, he was on the side of the directory. It was he who proposed the law concerning the conscription. Being afterwards appointed general of the army of the Danube, he crossed the Rhine, March 1, 1799, entered Suabia, attacked the arch-duke Charles, was beaten at Stockach, March 25, and was forced to retreat. April 10, he was superseded by Massena. After the révolution of the 18th Brumaire (Nov. 9), which he opposed, he received (July, 1800) the command of Piedmont. In 1802, he became a member of the state council, and was chosen to the senate. In 1803, Napoleon named him general-in-chief of the army in Italy, and, in 1804, marshal of France, and grand cross of the legion of honor. When, in September, 1805, he declared that his army was too weak, Massena received the command of it. In 1806, he went, as general-in-chief, under king Joseph, to Naples, and, in 1808, he followed him as major-general to Spain. Vexed at finding every misfortune laid to his charge, he returned in 1809; but, when Napoleon undertook the war against Russia, Jourdan was ordered back to his post in Spain. After the loss of the decisive battle of Vittoria, June 21, 1813, Jourdan lived in retirement at Rouen. In 1814, he was appointed commander of the fifteenth division. In this station, he declared in favor of Louis XVIII. March 10, 1815, he took the oath of allegiance anew to the king, and, when the latter left France, retired to his seat. Napoleon made him a peer in June, and intrusted him with the defence of Besançon. After the return of Louis, Jourdan was one of the first to declare for him. He afterwards presided instead of Moncey in the court-martial upon marshal Ney, which declared itself incompetent to judge him. In 1816, the king of Sardinia sent him his portrait, as a token of his gratitude for his administration of Piedmont, in 1800; and Louis XVIII named him, in 1817, commander of the seventh division, and, in 1819, raised him to the peerage. He belonged to the party of the liberal constitutionalists.

JOURNAL. Every one has found, with surprise, how quickly impressions, even

of important events, vanish; how quickly we confound dates and forget names. "It is singular," says Byron, "how soon we lose the impression of what ceases to be constantly before us: a year impairs: a lustre obliterates. There is little distinct left without an effort of memory," &c. For him, then, who wishes to live beyond the passing moment, and retain vividly the memory of his past life, it is of great importance to keep a journal. The practice, indeed, is somewhat in disrepute, owing to the frivolous details of some journals, and the sentimental folly of others. Experience leads us to advise the keeping of a brief journal, to retain the vestiges of the passing time. A date, a name, a jest, a grave observation, interspersed now and then with a whole day's proceeding, given in as condensed a form as possible, a slight drawing, &c., may afford valuable reminiscences. A simple rule is to put every thing in your journal which you expect will be interesting to you after a series of years. Young persons especially should avoid loading their journals with sentiment. In addition to the pleasure which we derive from a faithful picture of our former lives, it is very useful for a hundred purposes, to have the means of finding exact dates, descriptions and names.

Journal, in navigation; a sort of diary or daily register of the ship's course and distance, the winds and weather, together with a general account of whatever is material to be remarked in the period of a sea voyage, such as the shifting, reducing or enlarging the quantity of sail, the condition of the ship and her crew, the discovery of other ships or fleets, lands, shoals, breakers, soundings, &c.

Journal is also the name given to newspapers and some other publications which appear at regular intervals. (See *Newspapers*, and *Periodicals*.)

JOURNEYMAN, formed from the French *journée* (a day's work), anciently signified a person who wrought with another by the day; but it is now used to designate any mechanic who works for another in his employment, whether by the month, year, or any other term. It is applied only to mechanics in their own occupations.

JOUY, Victor Etienne de, member of the second class of the institute, since 1815 a member of the French academy, a popular dramatic poet, born 1769, at Jouy, near Versailles, was, for a long time, a soldier, having served, in 1787, in Cayenne, then during the revolution, was several times imprisoned, entered the ser-

vice again, and retired 1797, since which time he has devoted himself entirely to literary studies. He was the author of the famous opera, the *Vestal* (1820, set to music by Spontini), Ferdinand Cortez, *Les Bayadères*, &c. He is particularly happy in describing the manners and customs of the day, and lashes folly ably. His *Hermite de la Guiane* and *Franc-Parleur* have been translated into English, as have several of his other works. He was also a contributor to the periodicals. His tragedy *Sylla* was performed 150 times, between 1821 and 1824. The *Ouvres complètes d'Et. Jouy* appeared, Paris, 1823 et seq. (See *Jay*, *Antoine*.)

JOVELLANOS, Gaspar Melchior de, one of the most distinguished Spaniards of modern times, was born in Gijon, in Asturia, Jan. 5, 1744, of an ancient and noble family, and studied at Oviedo, Avila and Alcala de Henares. As soon as he left college, according to the custom of the country, to raise lawyers of noble birth immediately to the bench, Jovellanos was made *alcalde del crimen*, or a member of the criminal branch of the *audiencia* in Seville. Count Aranda, then president of the council, becoming acquainted with him, seems to have marked him out for one of his new school of administration, in his attempts to improve the state of the country.* He advanced rapidly in his professional career, in the complicated system of the Spanish judiciary, and was finally appointed to the quiet and dignified station of member of the council of the military orders at Madrid. Here he became a useful member of various learned societies, particularly of the *Real Sociedad economica Matritenze de Amigos del Pais*—an institution intended for the promotion of agriculture, manufactures and trade. In the meetings of this society, he read his *Elogios* of the celebrated architect don Ventura Rodriguez, and of king Charles III; and it was by the command of the same body that he wrote his celebrated *Informe sobre un Proyecto de Ley Agraria*, to which he mainly owes his fame. It is not true that he was prosecuted for the free principles expressed in this work. Jovellanos formed an intimate friendship with a brilliant French adventurer, Cabarrus, which proved fatal to him; for the latter became entangled in a prosecution, instituted by count Lerma, minister of finances, which led to his disgrace at court, and he

* Jovellanos was the first judge in Spain who had the courage to abandon the wig; and it required all the support of the prime minister, count Aranda, to countenance this step.

was banished to his native place. Here he remained from 1790 to 1797, entirely devoted to his various studies and useful projects, including, among other things, the working of coal mines. He also founded the royal Asturian institution—his darling project up to the last moments of his life. Meanwhile don Manuel Godoy, afterwards Prince of Peace, had risen, or rather leaped, from the barrack to the station of prime minister. Godoy was an ignorant man, who happened to adopt the idea of being a "philosophical minister." Cabarrus became his favorite, and Jovellanos was again invited to office, which he accepted with great reluctance. On his arrival at Madrid, he dined with Godoy and his mistress; and we learn from one of his letters how repugnant this and the whole affair were to his stern virtue. Still, the thought that he might do some good in the wretched state of the public administration, kept him in public life. Jovellanos was made minister, and a colleague of Francesco de Saavedra, with whom he soon formed a close friendship. They were both sensible of the miserable character of the government of Godoy, and prevailed on the king to dismiss him. Saavedra was appointed, in his place, minister of foreign affairs. But this administration was soon dissolved, and both lost their places. Jovellanos was not so much regretted as might have been expected from his noble character, for he was not a very practical head of a department. The revenge of the Prince of Peace was slow, but deep. Marquis Caballero, than whom a baser instrument could hardly be found, even in that court, and in those times, was chosen to persecute him. A Spanish translation of Rousseau's *Contrat Social*, in one of the notes of which Jovellanos was mentioned favorably, gave the pretext. He was arrested, carried from one place to another, and, at last, put in a Carthusian monastery in the island of Majorca: His addresses to the king from this place are bold and vigorous, and were read by the whole nation, because the hatred against the Prince of Peace was then at its height. Intestine commotions and foreign power at last put an end to the wretched government. Charles IV was compelled to abdicate in favor of his son Ferdinand, with whom Caballero, betraying his friends, had sided, so that the mob, who had forced Charles IV to abdicate, shouted, *Viva el picaro Caballero!* (the knave Caballero for ever!) Jovellanos was now recalled by the same person who had shamefully persecuted

him. He demanded a trial; but Napoleon's stroke at Bayonne changed the face of Spanish affairs. Joseph, his brother, anxiously engaged all men in his administration, who stood high in the esteem of the people, and offered Jovellanos the port-folio of the interior, advised to do so by Urquijo, D'Azanza, Massaredo, O'Farill (q. v.), and Cabarrus, the intimate friends of Jovellanos, who said they had a positive assurance of his willingness to accept it. If this was actually the case, either the loss sustained by Joseph's party at Baylen, or the insurrection of the Spaniards soon after this event, made him change his mind. Jovellanos, on the other hand, assures us that his friends urged him to accept the ministry, but that he never thought of doing so, thus forming one of the few well informed and liberal men who did not join Joseph. Jovellanos embraced the cause of the insurgents, and became a member of the central junta, where it was chiefly owing to him, that the council—precisely the same in Spain as the parliaments in France, in *esprit-de-corps*, aristocratic feeling, sale of offices, &c.—was revived. No sooner had the council met, than it opposed the central junta, which was finally dissolved, and Jovellanos was shamefully treated. To expose the council, and defend himself and the junta, was the last of his labors as a writer. He died Nov. 27, 1811, 67 years old. The cortes, though he objected to the principle upon which they were founded, declared him *benemerito de la patria*, a distinction afterwards often bestowed injudiciously. His Spanish prose is considered the finest of modern times. His *Elogios*, though possessed of some faults inherent in all compositions of that kind, are redeemed by great beauty of language and depth of thought. He also wrote an Essay upon Dramatic Exhibitions and Public Diversions, some poems, and a tragedy, *El Pelayo* (the brave Goth who defended the independence of Spain against the Moors), which was prevented by the clergy from being played before 1790, and a translation of the first book of Milton; but his poetry will not procure immortality for his name. The *Pan y Toros* (Bread and Bulls), an essay against bull-fights, has been generally ascribed to him, but without reason. In an excellent address at the distribution of prizes in the academy (of fine arts) de St. Fernando, in 1781, he depicted the course of the fine arts to his time, from which Cumberland derived his opinions on Spanish artists. According to Jovellanos, Lepe de Vega and Jordanes

were the promoters of bad taste, the former in poetry and the latter in painting.—See *Memorias para la Vida del Excmo. Don Gaspar Melchior de Jovellanos, y Noticias analíticas de sus obras por Don Juan Agustín Ceán Bermúdez* (Madrid, 1814), extracts of which are given in the Letters from Spain, by Leucadio Doblado (Blanco White), London; and *Noticias Historicas de Don G. M. Jovellanos, consagradas a sus respetables Cenizas. I. M. de A. M.* (Palma, 1812, 4to.) The wretched state of the Spanish book-trade does not allow a complete collection of his works to appear.

JOVIUS, Paul (or *Paolo Giovio*), a celebrated Italian historian, born at Como, in 1483, studied medicine at Pavia, but took orders, and was bishop of Nocera at the time of his death, in 1552. In his youth he read the classics under the direction of his brother at Rome, and was inspired with the desire of becoming the historian of his time. His first attempt was read by pope Leo, to an assembly of cardinals, and the pontiff exclaimed, that—"after Titus Livy—there is no writer more elegant and eloquent." Tiraboschi shows that he has often been represented as a liar and flatterer, and two letters of Jovius himself appear to furnish ground for objections against him. He there asserts that an author has the privilege of dressing some in soft silk, and others in linen; and that he would not write without being paid. "*Sto in otio, quia nemo nos condudit.*" Ranke, in his valuable work *Zur Kritik neuerer Geschichtschreiber* (Berlin, 1824), justly observes that a letter may be written in a moment of ill humor, but his works must be examined to determine whether he actually praised his friends and patrons immoderately. He openly censures the popes, his masters, in expressions which Catholics would blame in a Protestant writer; and we ought not to forget the passages in which he speaks of the fidelity due from a historian. As to the money which he wanted for his writings, it is easily explained. In his time, authors received no remuneration from publishers, but from princes or other eminent individuals. But we have no reason to suppose that this affected his statements. Ranke observes, that he has not found any misrepresentation of facts, in order to please, in Jovius's works, as far as he had accurately examined them, which was down to the year 1530. As Jovius lived at the court of the pope, then still, to a certain degree, the capital of Christendom, he became personally acquainted with many individuals of the

first importance in history, or other eyewitnesses, from whom he gathered information. His style is not unfrequently too florid or diffuse, and his statements may, perhaps, be colored by his partialities. His Latin is very excellent, but the deep views of a Machiavelli are wanting. His works are, *Historia sui Temporis* (1494—1547), lib. xlv (2 vols., Florence, 1548—1552, fol.); *Elogia Virorum erudit.* (Florence, 1549, fol.); *Elogia Virorum bellica Virtute illustrium* (ib. 1551, fol.); *Comment. de Rebus Turcicis* (Wittenberg, 1537); *Descriptio Britannie, Scotia, Hibernie et Orcadam* (Bâle, 1578, fol.).

JOYEUSE ENTRÉE; the name given to the important privileges of the estates of Brabant and Limburg, with Antwerp, which the dukes were obliged to swear to maintain, before they were allowed to enter the ducal residence, from which circumstance the name was taken. The most important of these privileges was, that the people were released from all allegiance, whenever the duke should attempt to violate their rights. So important were these privileges considered, that many women went to Brabant to be confined there, that their children might enjoy the rights of a citizen of Brabant.

JUAN (pronounced *huan*, with a very aspirated *h*). *Juan* is the Spanish name for *John*, and a character named *Don Juan* is found in the literature of most of the modern nations of Europe. As far as we know, this character first appears in the *Burlador de Sevilla y Convidado de Pierra*, a comedy by Gabriel Tellez, commonly called *Tirso de Molina*. It is well known that the early French dramatical poetry was much influenced by the Spanish, and the *Convidado de Pierra* was reproduced by Molière, as *Don Juan, ou Le Festin de Pierre*, a comedy in five acts, after the Spanish piece had already met with great success in an Italian dress in Italy. This name has derived its greatest fame, however, from the opera of Mozart called *Don Juan*, one of his most brilliant compositions. The variety of sentiments, which the grand composer was able to express in this opera, gave to his vast genius an opportunity to treat, almost in the same breath, the most ludicrous and the most sublime subjects. *Don Juan* is justly one of the most popular compositions of the German opera. In all these works, *don Juan* is a travelling rake, who practises every where the arts of seduction. He is equally successful in the higher and the lower ranks, and, having invited the marble statue of a commander to sup with him, is horrified

by seeing the statue actually descend from his marble steed to accept the offer. Don Juan is finally consumed by flames from the infernal regions. It is well known that lord Byron gave to the most notorious of his poems the name of *Don Juan*, not keeping to the old story, but because "he wanted a hero."

JUBA, a king of Numidia and Mauritania, favored the cause of Pompey against Julius Cæsar, and, after the battle of Pharsalia, joined his forces to those of Scipio. He was conquered in a battle at Thapsus, and totally abandoned by his subjects. He killed himself, with Petreius, who had shared his good fortune and his adversity, A. U. C. 707. His kingdom became a Roman province, of which Sallust was the first governor.

JUBA II, a son of Juba I, was led among the captives to Rome, to adorn the triumph of Cæsar. In his captivity, he applied himself to study. He gained the hearts of the Romans by the courteousness of his manners, and Augustus rewarded his fidelity by giving him in marriage Cleopatra, the daughter of Antony, conferring upon him the title of king, and making him master of all the territories which his father once possessed, A. U. C. 723. The Mauritians rewarded his benevolence by making him one of their gods. The Athenians erected a statue in his honor, and the Æthiopians worshipped him as a deity. Juba wrote a history of Rome in Greek, which is often quoted and commended by the ancients. Only a few fragments of it remain. He also wrote on the history of Arabia, and the antiquities of Assyria, chiefly collected from Berosus. Besides these, he composed some treatises upon the drama, Roman antiquities, the nature of animals, painting, grammar, &c., now lost.

JUBILATE; the third Sunday after Easter. In the primitive church, divine service was begun with the words of the 66th Psalm, 1st verse—*Jubilate Deo, omnes terræ*, Sing to the Lord, all ye lands.

JUBILEE; one of the extraordinary festivals of the Jews, which was held at the end of every fiftieth year. This festival was proclaimed by the sound of trumpets through the whole country, on the evening of the day of atonement, about the autumnal equinox. It was distinguished by many eminent privileges. All debts were to be cancelled. All slaves or captives were to be released. All estates which had been sold reverted to their original proprietors or their descendants.

Houses in walled towns, however, were exempted from this provision. During this year, the ground was not cultivated. The political object of it was to prevent great oppression of the poor, as well as their liability to perpetual slavery. The distinction of tribes, too, was thus preserved, in respect both to their families and their possessions; for the law rendered it necessary for them to keep genealogies of their families, in order that they might be enabled to prove their right to the inheritance of their ancestors. The jubilee, too, probably assisted in the computation of time, like the Greek Olympiads, the Roman lustra, and the Christian centuries. In imitation of the Jewish jubilee (or, as some later writers have endeavored to prove, of the secular games of the Romans), the Roman Catholic church instituted a year of jubilee, during which the popes grant plenary indulgences to all who, having confessed and partaken of the Lord's supper, shall visit certain churches. The first proclamation for a jubilee was issued in 1299, by Boniface VIII. The profit which the Romish chair drew from it, and the wish that more Christians might have an opportunity of partaking in it, induced Clement VI, in 1350, to declare every fiftieth year, then Urban VI, in 1389, every thirty-third year, and Paul II, in 1470, every twenty-fifth year, a year of jubilee. The quantity of money which the jubilee brought to Rome, induced Paul to designate certain churches, in the different countries of Christendom, where votaries, who could not come to Rome, might obtain the advantages of the jubilee; but on condition that the largest part of the profits of these provincial jubilees should flow into the treasury of the holy see. The money collected by means of these general indulgences was sometimes spent in wars against the Turks, and sometimes used to advance the building of the church of St. Peter's, which, ever since the sixteenth century, had been the standing pretext under which they were issued. The reformation, to which the sale of indulgences gave the first impulse, sensibly diminished these profits, and the jubilee which Benedict XIV proclaimed in 1750 had but little success, as was also the case with the last, in 1825, proclaimed by Leo XII. Gulielmus Ventura Astensis, who, prompted by motives of religion, visited Rome during the jubilee in 1300, gives an account, in Latin, of the huge throng which flocked to the holy city, and the abundant harvest which the pope reaped.

The following is a translation of a few sentences of his account: "Going out of Rome on the eve of the nativity of Christ, I saw a great crowd, which no man could number. It was noised, among the Romans, that there were 2,000,000 of both sexes in the assembled multitude. Repeatedly I saw men and women trampled under foot in the press, and I myself was several times in danger of the same fate. The pope received from them a vast amount of money; for, day and night, two priests stood at the altar of St. Peter, holding rakes in their hands, with which they raked in countless sums (*tenentes in eorum manibus rastellos, rastellantes pecuniam infinitam*)." The ferocious trampling of this countless throng brings to mind some of the ceremonials of Hindoo worship. The rakes, with which the money was gathered into the pontifical bank, have, in later days, been adopted as the furniture of a hazard or *rouge et noir* table in gaming-houses.

JUDA, the tribe and kingdom. (See *Hebrews*, and *Jews*.)

JUDEA. (See *Palestine*.)

JUDAS; surnamed *Iscariot*, from the place of his birth; one of the 12 apostles of Jesus, whom he betrayed into the hands of the Jewish priests, under the semblance of a friendly salutation. His divine Master addressed to him the mild reproof,—Do you betray the Son of Man with a kiss? Remorse for his crime led him to anticipate the Savior's death by suicide. The Cainites, Cerinthians, and some other heretics, held him in great veneration.—*Judas*, brother of James, according to Luke, one of the 12 disciples. Matthew and Mark call him *Thaddeus surnamed Lebbaeus*. He is considered the author of the epistle which our translators call the *Epistle of St. Jude*, though the name in the Greek is the same in both instances.

JUDAS MACCABEUS. (See *Jews*.)

JUDAS' TREE. The American species (*cercis Canadensis*) is a small tree, remarkable for the beauty of its rose-colored flowers, which, appearing in profusion before the development of the leaves, render it, on a distant view, very similar in appearance to a peach tree in blossom. The structure of the flowers, however, is widely different, and places it in the natural family *leguminosæ*. The leaves are large, simple and cordate. In the spring months, it constitutes one of the principal ornaments of the forest in most parts of the U. States south of the 41st parallel of latitude. The European species is very similar in appearance, and is found only

in the more southern parts of that continent.

JUDGES, in Hebrew history. (See *Hebrews*.)

JUDICA; the fifth Sunday after Lent; so called because the primitive church began the service on that day with the words *Judica me, Domine* (*Ps. xliii. 1.*)

JUDITH; widow of Manasses; a Jewish heroine of great beauty, virtue and courage, whose history is given in the book which bears her name, the author and age of which are unknown. The Catholic church admits it into the canon, but it has been generally considered apocryphal by Protestants. Judith, it is well known, is represented as going out to the tent of Holofernes, an Assyrian general, who was besieging Bethulia, charming him with her beauty, and taking advantage of the admission to his tent, thus afforded her, to cut off his head, while he slept, with his own sword. Some writers have given an allegorical interpretation to this history.

JUGERUM; a Roman measure; a piece of ground which could be ploughed in one day by a yoke of oxen; a Roman acre, 240 feet long, 120 feet broad (28,800 sq. feet). It was the unit of field-measure, and divided into $\frac{1}{2}$ *jugerum* (*actus quadratus*)=14,400 Roman square feet; $\frac{1}{3}$ *jugerum* (*clima*)=3600. *Actus minimus* was a strip 4 feet wide and 120 feet long = 480 Roman square feet. Two *jugera* were called *heredium*; 100 *heredia* made one *centuria*, and four *centuria* (= 800 *jugera*) one *saltus*. In the time of the kings, two *jugera* were reckoned a sufficient allowance for a father of a family; at a later period, seven; 376 B. C., fifty; but, even at a still later period, it was considered dishonorable for a senator to possess more than 500 *jugera*.

JUGGERNAUT, or JAGANATH (i. e. *the lord of the world*); the most celebrated and sacred temple in Hindostan, in the district of Cuttack, on the coast of Orissa. The temple stands near the shore, not far from the Chilka lake, in a waste, sandy tract, and appears like a shapeless mass of stone. The idol is a carved block of wood, with a hideous face, painted black, and a distended, blood-red mouth. It is magnificently dressed, and the appellation of *Juggernaut* is one of the names of Vishnu, the preserver of the world. (See *Indian Mythology*.) On festival days, the throne of the image is placed on a tower 60 feet high, moving on wheels, accompanied with two other idols—his white brother, Balaram, and his yellow sister, Shubudra—who likewise sit on their separate thrones.

Six long ropes are attached to the tower, by which the people draw it along. The priests and their attendants stand round the throne on the tower, and occasionally turn to the worshippers, with indecent songs and gestures. The walls of the temple and the sides of the car are also covered with obscene images, in large, durable sculpture. While the tower moves along, numbers of the devout worshippers throw themselves on the ground, in order to be crushed by the wheels, and the multitude shout in approbation of the act, as a pleasing sacrifice to the idol. In the temple, a number of prostitutes are kept for the pilgrims who come there, and also several consecrated bulls, which are commonly fed by the pilgrims with herbs. A bone of Crishna is preserved in the temple as a precious relic, but shown only to a few. Every year, particularly at two great festivals, in March and July, the pilgrims flock in crowds to the temple. It is calculated that there are at least 1,200,000 of them annually, of whom it is said nine out of ten die on the road, of famine, hardship and sickness; at any rate, it is a well known fact that the country, for miles round the sacred place, is covered with human bones. Many old persons undertake the pilgrimage that they may die on the holy ground. Not far from the temple is a place called *Golgotha* by the Europeans, where the corpses are thrown, and dogs and vultures are always feeding on the carrion. The contributions of the pilgrims amount to a considerable revenue (about £12,000 per annum), which falls to the government, after deducting the expenses of the temple. The English took possession of the province in 1803, and forbore to exact the contribution of the pilgrims, during the marquis of Wellesley's administration; but on his departure from India, the Bengal government passed an ordinance for the management of the pagoda, and the taxing of the pilgrims. The superintendence of the temple and priests was given, in 1809, to the rajah of Kurdah, with the charge of executing the old regulations. A road from Calcutta to the temple has been made since 1810, to which a wealthy Hindoo, rajah Sukmoy Roy, contributed £16,000 sterling, on condition of its being called by his name.

JUGGLERS; men who perform, in public, tricks of legerdemain. In the middle ages, the name of *jongleurs* was given to the instrument-players who accompanied the Troubadours. Afterwards these performers employed themselves in tricks

and games, which, if Ducange's derivation of *jongleur* from *jocularis*, or *joculator*, is correct, must have been their original occupation. They accompanied with dramatic action the songs which they helped to sing; they were buffoons, and united in bands, which had many privileges. They formed in Paris a society, the members of which dwelt together in the *Rue des Jongleurs*, afterwards *St. Julien des Ménétriers*. Those whom we now call jugglers, men of wonderful activity, and skilful equilibrists, were then distinguished by the name of *bateleurs*, or *batalores*. From the accounts of travellers, we know that in Hither and Farther Asia, between the old Ganges and the Orontes, where the limbs are very pliant, the arts of balancing, of tumbling, and of moving the body rapidly, and with perfect regularity, are still preserved, and have been handed down for thousands of years. Fanatical penances, and the excitement of religious orgies, in those countries where the body is capable of the most unnatural contortions, first gave rise to these tricks of jugglery, which were thought to assist in atoning for the past, or in predicting and determining the future. Thus originated there the juggling tricks, which are likewise met with among several tribes of North America. Raised to an art by the Hindoos, a people addicted to meditation, and fond of games, these tricks became a profession, which is still exercised in its highest perfection in China, on the coasts of Coromandel, and in both peninsulas, on this side, and beyond the Ganges. During the last few years, the people of Europe have been able to verify the accounts of the agility, the muscular strength, and the suppleness in the limbs of these Hindoos, by the sight of jugglers, who, from time to time, have crossed over from England to the continent. One of these men, named *Ramo Samee*, also attracted considerable attention, some years since, in the U. States. Böttiger has proved that, in ancient times, there were still more wonderful exhibitions of this kind. That which appears to be the most extraordinary trick of these jugglers—the swallowing the sword, and the catching several knives thrown quickly into the air—was often performed before the ancients; and an inscription in Gruter (*Thes.* p. DCXXXVII, p. 1) even states that, in the baths of Agrippa, of Titus, and of Trajan, at Rome, a bear was exhibited, dressed in a long toga, who played the same tricks with balls, that surprise us in these Indian jugglers. To such extraordinary occupations did the patience of the

mansuetarii constrain even beasts, in order to amuse the Roman people, always greedy of what was new and strange, or the luxurious populace of the great provincial cities. Games in which balls, painted with various bright colors, were thrown round the body without interruption, exercises in equilibrium, where every false step was instant death, were exhibited by these birds of passage, the wandering children of every city, in a perfection which yet astonishes us in the accounts and descriptions of the fathers of the church. For the fathers, with Manetho (*Apotelesmat.* iv, 289), and the Latin poet Manilius, whose astronomical poem draws the horoscope for different stations of life, furnish the most satisfactory idea of this part of ancient art. Those who threw the knives the ancients called *ventilatores*, and those who threw the balls in a perpetual circle, are mentioned by Quintilian under the name of *pilarii*. One of the Hindoos, who lately exhibited in Europe, was wonderful for his power of moving every part of his body, without one part preventing the motion of another. While he held in equilibrium, on his forehead, a little building, consisting of pieces of sticks, which would fall apart if not very nicely balanced, and continually put it together and took it to pieces, with his toes he kept in rapid motion a number of rings, which alone would seem to require great skill and attention. A very difficult feat, which he also performed, was to string pearls upon a thread by means of the tongue. This feat, too, the fathers mention expressly, so that the most wonderful tricks now exhibited were performed before the ancients, that is, before the inhabitants of the large cities of the Roman empire, such as Antioch. Some have endeavored to derive from the name of the old Iynx sorcerers (*γυκρες*) the modern word *juggler*, which came last from the Provincial *Langue-d'Oc*. The two arts, which are still united in India, that of divination and of exhibitions of bodily address and agility, were both practised by these ancient artists.

JUGURTHA* ; the son of Manastabal, a

* Mr. William B. Hodgson, in his letters to Mr. Duponceau (Transactions of the American Philosophical Society, vol. iv., new series, No. 1), says, "The name *Jugurtha*, it seems to me, may be easily recognised in the Berber word *jugurth*, which signifies a *crow* or *raven*. This name reminds me of those of our Indian chiefs, the *bear*, the *wolf*, the *tortoise*, &c., and is good enough for a barbarian king. *Corvus*, *Corvinus*, were not uncommon names even among the civilized Romans; but of the names *Juba*, *Syphax*, *Masinissa*, I own I cannot make any thing."

son of Masinissa by a concubine. Under the care of Micipsa, his father's brother, and king of Numidia after Masinissa, he received as good an education as the two sons of Micipsa, Adherbal and Hiempsal. He was of a fine person, of manly strength, and endowed by nature with superior talents. He early formed himself for a soldier. Micipsa, who began to fear him, determined on his removal, and sent him with an army to assist the Romans against Numantia; but here his valor and conduct won the esteem of the army, and the friendship of Scipio. Micipsa now sought to conciliate him by favors. He adopted him, and declared him joint heir to the crown with his sons. On his death-bed, he exhorted him to friendship and fidelity towards his two sons, united with him almost by the bonds of brotherhood; and he commanded them to honor Jugurtha, and to emulate his virtues. Jugurtha promised every thing to the dying king, although he had already resolved to become sole master of Numidia. Soon after the death of Micipsa, he caused Hiempsal to be murdered, and drove Adherbal from the country, taking possession of his whole portion of Numidia. Hearing that Adherbal had gone to Rome, he also sent ambassadors there, to counteract by bribes the effect of his representations. The greater part of the senate declared in his favor. Ten commissioners were named to divide Numidia between Adherbal and Jugurtha, and to make an investigation on the spot, with regard to the murder of Hiempsal. These also were bribed. They declared the murder an act of self-defence, and allotted to Jugurtha the richest provinces. The commissioners had hardly departed, when, to draw Adherbal into a war, he made an attack upon his territory, and committed the most terrible devastations. All this was borne without complaint. Jugurtha now made another attack upon Adherbal, and obliged him to take up arms in self-defence. Adherbal was defeated, and his army destroyed, near the capital city of Cirta. He fled within the walls, and was immediately besieged. He found an opportunity, however, to make known his unhappy situation at Rome; but Jugurtha's friends, by their intrigues, prevented any thing being done except the sending of commissioners. As might have been expected, their mission was of no avail. In the mean while, the siege of Cirta was pressed with vigor. Adherbal was forced to surrender, and, in spite of his promise

to grant him life, Jugurtha caused him to be inhumanly murdered. The Roman people now called for more vigorous measures against such a perjured villain, and the senate declared war. The chief command was given to the consul Lucius Calpurnius Piso, a man who united military talents with the most shameful avarice. At first, he carried on the war with zeal, and conquered several cities; but he soon after entered into a negotiation with Jugurtha, and granted him, as he had not been sparing of his money, very favorable conditions. He was to retain Numidia, and was merely to give to the republic a certain number of horses and elephants, and a moderate sum of money. Much discontent was shown at Rome, and Jugurtha was obliged to come with a safe conduct, to stand before the tribunal of the people. In Rome, he succeeded in gaining one of the tribunes, so that, when about to answer before the people, the tribune imposed silence upon him, and the assembly dispersed without deciding any thing. Jugurtha now carried his insolence so far in Rome as to cause the assassination of Massiva, an illegitimate son of Gulussa, brother of Micipsa, to whom the Roman people were inclined to award the crown of Numidia. As a safe conduct had been promised him, he merely received orders to quit the city immediately. War was again declared against him, and carried on by the consul Posthumius Albinus; but the artifices of Jugurtha caused the year to pass without any decisive measures being taken. This prince was also fortunate enough, immediately after the departure of the consul, to defeat his brother, Aulus Posthumius, and constrained him to make a shameful peace, and to suffer his army to pass under the yoke; on which account the senate refused to ratify the peace, and sent the celebrated Metellus to Numidia. This general conquered Jugurtha in a great battle, and remained firm against all his bribes. When on the point of signing a shameful peace, and surrendering to the Romans, Jugurtha, through fear that they might inflict vengeance on him for his former crimes, suddenly changed his resolution, and determined once more to abide the worst. He summoned together all his remaining power, and began operations with so much skill, that Metellus saw that his wish of ending the war would not be fulfilled. Marius, at the same time, had, by his intrigues, caused the recall of Metellus, and his own appointment in his place; but, before he left Rome, Jugurtha

had narrowly escaped falling into the hands of the Romans by the treachery of one of his servants, Bomilcar. Again beaten by Metellus, he resolved to ask for the assistance of the Getulians, and of Bocchus, king of Mauritania. He obtained it, and, at the head of a new army, attempted to reconquer his kingdom. In the mean while, Marius had arrived in Africa to supersede Metellus. After taking the city of Capsa, and the fortress of Mulucha, he retreated towards the sea-coast, but, on his way, was attacked by the joint army of Jugurtha and Bocchus, and obliged to retreat to a neighboring mountain. Here the enemy surrounded them, and, in the expectation of complete victory, gave themselves up to immoderate joy; but when, fatigued with dancing and feasting, they yielded to sleep, the Romans rushed down upon them from the heights, and completely routed them. Four days after, Jugurtha and Bocchus made a new attack, hoping to surprise the Romans; but Marius received them so valiantly, that nearly their whole army of 90,000 men was cut to pieces, though Jugurtha himself fought with extraordinary bravery. The king of Mauritania now concluded a peace with the Romans, and abandoned his ally. Sylla persuaded him to draw Jugurtha into his power, and deliver him up to the Romans. Under pretence of mediating between the contending parties, Bocchus enticed him to his court. He was here seized and delivered to Sylla, who sent him, in chains, to Marius, at Cirta. Thus the war was ended, and Numidia became a Roman province. Marius adorned his triumph with his prisoner Jugurtha and his two sons. After this prince had suffered many insults from the people on this occasion, he was thrown into a dark prison, where he was starved to death after six days. Some historians relate that he was executed in prison immediately after the triumph. His two sons remained captive at Venusium. Sallust has written an account of this war in a masterly style.

JULIA, the only daughter of Augustus and Scribonia, possessed pleasing manners, extraordinary beauty, and a cultivated mind. She was first married to the young Marcellus, the son of Octavia by her first husband. Having soon become a widow, she married Marcus Vipsanius Agrippa, to whom she bore three sons and two daughters. Even during the lifetime of her husband, she led an unprincipled life. All in Rome, except Augustus, were acquainted with her licentious

conduct. After the death of Agrippa, he gave her in marriage to Tiberius, who well knew her character, but did not dare to oppose the will of the emperor. After this new marriage, Julia by no means gave up her former indulgences, so that Tiberius, unwilling to be a witness of them, or to complain to Augustus, left the court. Her shamelessness went so far that she caused to be placed on the statue of Mars, every morning, as many crowns as she had had lovers in the past night. Her excesses at last could no longer be concealed from her father. In the most violent anger, he determined at first to have her executed, but afterwards consented to banish her to Pandataria, a desolate island on the coast of Campania, where her mother, Scribonia, accompanied her. He would never forgive her, notwithstanding the earnest supplication of the people. At last, however, he was prevailed upon to permit her to leave the island for the city of Rhegium, on the continent. She never dared to return to Rome. After the death of the emperor, she suffered still more. As long as he had lived, Tiberius had always professed much tenderness for her, and had often begged him to pardon her; but now he treated her with the greatest cruelty. Before, she could not leave the city of Rhegium: Tiberius now confined her to her house. He even took from her the little pension which Augustus had allowed her; and she died in the 15th year of her exile, in poverty and distress.

JULIAN. Flavius Claudius Julianus, a Roman emperor, to whom the Christians gave the surname of the *Apostate*, son of Julius Constans (brother of Constantine the Great) and of Basilias, his second wife, daughter of the prefect Julian, was born at Constantinople, in the year 331. When hardly six years old, he saw his father and several members of his family murdered by the soldiers of the emperor Constans II, his cousin (a son of Constantine the Great). He and his younger brother Gallus narrowly escaped death. The education of the two princes was intrusted to Eusebius of Nicomedia, who gave them Mardonius for their instructor. They were brought up in the Christian religion, which was yet a new one at the court of the emperor. They were obliged also to enter the order of priests, that they might thus be removed from the throne, and they were chosen readers in their church. This education produced a very different effect on the minds of the two brothers, whose charac-

ters were very dissimilar. Gallus, the younger, never left Christianity, and thus obtained the praise of the ecclesiastical historians. Julian, being older, had felt more deeply the persecution of his family, and the constraint and fear in which he was obliged to pass his youth. He therefore sought consolation in the study of philosophy and belles-lettres. At the age of 24, he went to Athens and to Nicomedia, where he enjoyed the society of several instructors, particularly that of the sophist Libanius. Here he was induced to reject the religion of those who had massacred his family, and to embrace paganism. Yet he does not appear to have had sufficient strength of mind to rise above the religious prejudices of that age. At least we find that he believed in astrology, in the science of the *haruspices*, in the art of calling up intermediate spirits to one's assistance, and learning from them the future, with several other superstitious notions. Constans, who feared an attack of the Germans upon the provinces of the Roman empire, determined at last, at the solicitation of his wife Eusebia, to give to Julian the command of an army against them. He was proclaimed Caesar by Constans, at Milan, in 355, whose sister Helen he received in marriage. He now proceeded, with a small body of troops, to Gaul, which was laid waste by the Germans. It was hardly to be expected that a youth, who thus far had attended only to the study of philosophy and belles-lettres, would be able, especially with so small means, to conquer the formidable enemy against whom he was sent. The emperor Constans himself appears not to have calculated upon the probability of such an event. After Julian had passed the winter in preparations for the ensuing war, he marched against the Germans, took several cities, conquered them in various engagements, and, in a great battle near Strasburg, completely defeated seven of their princes, and entirely delivered Gaul. He pursued the Germans beyond the Rhine, and conquered them in their own country. As a governor also, he displayed extraordinary talents. He gave to Gaul a new constitution. He settled the finances, diminished the taxes, and assessed them more justly, put an end to the abuses which had crept into the courts of justice, administered justice himself in the most important cases, and laid the foundation of cities and castles. While he was thus providing for the happiness of a great nation, he was accused, before Constans, of aiming at independen-

dence. The jealousy of the suspicious emperor could not fail to be excited by the brilliant career of his young kinsman in Gaul. He was even base enough to stir up, secretly, the Gauls against him, and to recall his best troops, under pretence that he wanted to employ them against the Persians. This order caused a rebellion among the soldiers, who were unwilling to go to Persia. They proclaimed their leader Julian emperor, in March, 360, in spite of his own resistance. Julian gave information of the state of things to Constans, who ordered him to renounce his title of emperor. Much as he was inclined to do this, the Gallic legions equally opposed his inclination. The emperor now sent an army against Julian, who made preparations in his defence. He left Gaul, where he had passed five years, took Sirmium, the capital of Illyria, and besieged Aquileia. Here he heard of the death of the emperor Constans. He now passed rapidly through Thrace, and reached Constantinople, December 11, 361, where he was immediately proclaimed emperor. He began by putting a stop to many abuses, and limiting the splendor of his court. Of the thousand barbers, and attendants at the baths, employed by his predecessors, he retained but a single one. The number of cooks, too, which was likewise very great, he reduced to one. The eunuchs were dismissed, as well as those called *curiosi*, who, under pretence of informing the emperor of useful things, were dangerous spies, and the bane of all social intercourse. After these retrenchments, he was able to remit to the people the fifth part of all their taxes. Julian sought to restore the heathen worship in all its splendor, and, on that account, opposed Christianity as much as was in his power, without, however, like many of his predecessors, cruelly persecuting the Christians themselves. He took from the Christian churches their riches, which were often very great, and divided them among his soldiers. He sought likewise to induce the Christians, by flattery or by favor, to embrace paganism, and, failing in the attempt, he labored to make their condition disagreeable. Thus, for example, he forbade them to plead before a court of justice, or to receive offices in the state. Indeed, the Christians were no longer allowed to profess their faith openly; for he well knew what powerful arms the Scriptures afforded for combating paganism. To render false the prophecy of Jesus, with regard to the temple at

Jerusalem, he permitted the Jews to rebuild it, about 300 years after its destruction; but it is said that flames of fire arose from beneath, and consumed some of the workmen. In the meanwhile, he wished to end the war with the Persians. His first campaign against them was successful. He took several cities, and advanced as far as Ctesiphon. Want of means of subsistence obliged him to retreat. June 26, 365, he was mortally wounded, and died the following night, in the 34th year of his age.—There is hardly, either in ancient or in modern history, a prince whom historians have judged so differently. Perhaps it is because his character was full of contradictions; and some believe that he had so many good and so many bad qualities, that it is easy to blame or to praise him without violating the truth. On the one side, learned, magnanimous, moderate, temperate, circumspect, just, merciful, humane; on the other, inconsistent, fickle, eccentric, fanatical and superstitious in the highest degree, ambitious, and full of eagerness to be at once a Plato, a Marcus Aurelius and an Alexander, he sought chiefly for the means of distinguishing himself from all others. At the bottom of all these features in his character, there appears to lie a sarcastic, sophistic coldness and dissimulation. Some of his works have come down to us. Several speeches, letters and satires, among which the satire on the Cæsars, and that on the people of Antioch, called *Misopogon*, are distinguished for wit and humor. The first is particularly esteemed. A critical judgment passed upon those who had sat upon the first of the thrones of earth, by a philosopher who had himself occupied the same seat, must indeed possess a peculiar charm. In his *Misopogon*, Julian severely lashes the Antiochians, but spares no praise when he speaks of himself. The best and most complete edition of his remaining works is that of Ezekiel Spanheim (Leipsic, 1696, folio). They prove that this emperor possessed talent, wit, vivacity, ease in writing, and some fertility; but he appears to have conformed too much to the taste of his age, in which a mere rhetorical style of declamation took the place of eloquence, antithesis the place of thought, and play on words the place of wit. He wrote also a work against the Christian religion, of which we have yet some extracts that have been translated into French by the marquis D'Argens.

JULIAN CALENDAR. (See *Calendar*, and *Epoch*.)

JULIANA; a female who possessed great influence at the court of the Mogul emperors of Hindoostan in the earlier part of the last century. She was born in Bengal, in 1658, and was the daughter of a Portuguese named Augustin Dias D'Acosta. After having suffered shipwreck, she went to the court of the great Mogul Aurengzebe, whose favor she conciliated by presenting him with some curiosities which she had preserved. Being appointed superintendent of the harem of that prince, and governess of his son Behadur Shah, she had an opportunity of rendering some important services to the latter, who succeeded to the crown in 1707, under the title of *Shah Aulum*. He was under the necessity of defending his newly-acquired authority against his brothers by force of arms; and, in a battle which took place, Juliana, mounted on an elephant by the side of the emperor, animated him by her advice when his troops began to give way; and to her exhortations he was indebted for the complete victory which he obtained. Her services were rewarded with the title of princess, the rank of the wife of an omrah, and a profusion of riches and honors. Shah Aulum had such an opinion of her talents, that he was accustomed to say, "If Juliana were a man, I would make him my vizier." Jehander Shah, who became emperor of Hindoostan in 1712, was equally sensible of her merit; and, though she experienced some persecution when that prince was deposed by his nephew, in 1713, she speedily recovered her influence, and retained it till her death, in 1733.

JULIERS; formerly a duchy in Westphalia, bounded north by Guelders, east by Cologne and the Rhine, south by Blankenheim and Schleiden, and west by Liege, Guelders and the Meuse. It now forms a part of the Prussian province of the Lower Rhine, and government of Aix-la-Chapelle. It has a fruitful soil, which produces all sorts of corn in abundance, together with good meadow and pasture land. Much woad also is cultivated here, and linen manufactured.

JULIERS-CLEVES-BERG; a province in Prussia, in the German circles of Lower Rhine and Westphalia, comprehending the late archbishopric of Cologne, the duchies of Cleves and Berg, &c. Population, 908,185; square miles, 3636. It is divided into three governments—Cologne, Düsseldorf and Cleves. It is one of the most populous territories belonging to Prussia. The Rhine passes through the

whole length of it. The inhabitants are Catholics, Lutherans and Calvinists.

JULIUS; the name of three popes, of whom we shall only mention the two last.

Julius II (Giuliano della Rovera), a native of Albizola, originally a fisherman, was elevated, by his uncle Sixtus IV, to the rank of a bishop and cardinal, was appointed papal legate to France, and, in 1503, was elected pope; and although, while cardinal, the friend of the French, he now became their enemy. He excommunicated the duke of Ferrara, gave Navarre to Spain, besieged Mirandola, commanded his army in person, formed the league of Cambray against Venice, and was altogether warlike in his measures. The king of France and the emperor convened a council at Pisa, before whom he was summoned to appear and explain his conduct; but he did not obey the summons, and called another council in the Lateran. In 1512, he made open war against Louis XII. The French defeated the papal army near Ravenna, but were soon after driven out of Italy. Julius died in 1514. He is considered one of the most immoral of the popes. His conduct certainly was little befitting the head of the Christian church. To procure means for building St. Peter's, he ordered the sale of indulgences, which was one of the immediate causes of the reformation, so that the Protestants may say, without paradox, that St. Peter's is the great monument of Protestantism. Connected with the plan of rebuilding St. Peter's by Bramante was that of embellishing the Vatican; and, on Bramante's recommendation, Julius II invited Raphael to Rome, in 1508, where he painted a superb suite of apartments, called *La Segnatura*. In the ducal gallery, at Florence, there is a fine portrait of Julius II by Raphael. (See *Bramante*, and *Raphael*.)

Julius III (Giovanni Maria Giocchi), a Roman of low birth, called himself *Del Monte*, because his family originated from Monte Sabino, in the Florentine territory. He was made cardinal by Paul III, in 1536, took an active part in the council of Trent, as papal legate, and was the chief cause that it was transferred to Bologna, against the will of Charles V. Julius was elected pope in 1550. He received the fugitive Nestorian patriarch Suluca, and endeavored to effect a union with the Nestorians. He died 1555, and is accused of the greatest licentiousness, even of unnatural intercourse with a

certain Innocent whom he created cardinal.

JULIUS CÆSAR. (See *Cæsar*.)

JULIUS OF MEDICI. (See *Clement*.)

JULIUS ROMANUS. (See *Giulio Romano*.)

JULLIEN, Marc Antoine, a contemporary French writer, born in Paris, in 1775, was for some time imprisoned during the revolution, on account of his invectives against terrorism, afterwards entered the army, and served under Bonaparte in Italy and Egypt. On the return of that general from Egypt, Jullien opposed his ambitious designs, but was employed as a diplomatic agent, and, from 1806 to 1810, held an office in the department of war. In 1813, he was arrested on suspicion of conspiring against the emperor, and, after the restoration, was concerned in establishing a journal, called at first the *Indépendant*, since the *Constitutionnel*. On account of the boldness of his opinions, he was obliged to retire to Switzerland; and, on his return to Paris, in 1817, published his *Manuel Electoral*. In 1819, he projected the *Revue Encyclopédique*, one of the most valuable of the French journals, which appears monthly, and contains reviews, essays and analyses of books in all departments of literature and science. M. Jullien visited Great Britain in 1822, for the purpose of extending his literary connexions. Among his contributors are Sismondi, Salverte, &c.

JULY; the seventh month in our calendar, which, in the Roman year, bore the name of *Quintilis*, as the fifth in the computation of Romulus, even after Numa had prefixed January and February. Marc Antony effected a change in its name, in honor of Julius Cæsar, who was born iv *Idus Quintilis*, and, thenceforward, by a decree of the senate, it was called *Julius*.

JUMNA, or **YUMNA**; a celebrated river of Hindoostan, which has its source in the Himalaya mountains. It enters the province of Delhi, and, passing the cities of Delhi and Agra, falls into the Ganges at Allahabad. Its length is estimated at 780 miles.

JUMPING MOUSE (*meriones*, F. Cuv.). This little animal bears a great resemblance, in the length of its hind legs, and mode of leaping, to the jerboa. It is found from Canada to Maryland, and perhaps still farther south. It is about the size of the common mouse. The head, back, and upper parts of the body, are reddish-brown, darkest on the back. The under parts are cream color, with a yellow streak passing along the body. The tail is longer

than the body. This animal frequents grain and grass fields: it breeds very fast, and occasionally commits considerable havoc. When the cold weather commences, it goes into winter quarters, and remains torpid till the warm season returns. The jumping mouse does not exclusively move on its hind feet, but is capable of running on all-fours with great speed. The leaps taken by this diminutive creature, when pursued, are astonishing. It sometimes clears five or six feet at a single bound. There is another species also found in this country, in the vicinity of Hudson's bay, which closely resembles the above, in its habits and mode of progression.

JUNE; the sixth month in our calendar. Vossius gives three etymologies of the name—one from *Juno*; another from *jungo* (to join), referring to the union between the Romans and Sabines, under Romulus and Titus Tatius; a third from *juniores* (the young men), Romulus having been said to have assigned the month of May to the elders, and that of June to the young men, when he divided the people into these two great classes, the former to serve in counsel, the latter in war. These origins are more fully explained by Ovid. The name has also been traced to Junius Brutus, the first consul.

JUNG, John Henry, called *Stilling*, was born 1740, in Nassau, and died in 1817, at Carlsruhe. In his youth, he was apprentice to a tailor. The desire of knowledge which always occupied him, made him afterwards attempt to become a schoolmaster. He was unsuccessful, and returned to the tailors' business, from which, however, he was called several times to become a tutor. At last he succeeded in procuring the means of studying medicine in Strasburg, and was afterwards a physician in Elberfeld. He has described, himself, the greater part of his life; and the celebrated work *Heinrich Stilling's Jugend, Jünglingsjahre und Wanderschaft* (Berlin, 1777, 3 volumes), in a new form, under the title *Lebensbeschreibung* (Berlin, 1806, 5 volumes), is incomparable. He relates, with modesty and simplicity, the way in which his life was passed among the classes of people less favored by exterior gifts of fortune; and his pious and pure heart discloses itself so unaffectedly and involuntarily, and the style is at the same time so excellent, that the work is one of the most popular among the German classics. It has a charm of a very peculiar kind, and many readers will sympathize with the author, even in those pas-

sages of mystical devotion, which do not accord with the tone of their own minds. His works of devout mysticism are very numerous. Those best known are his *Theobald der Schwärmer*, *Das Heimweh*, *Der Volkslehrer*, &c. Much opposition was excited by his strange work *Theorie der Geisterkunde* (Nuremberg, 1808), and the Apology for the same (1809), which is connected with his *Scenen aus dem Geisterreiche* (Frankfort, 1803). In these works, he not only shows his full belief in apparitions, and adduces numerous cases, which he considers undeniable, but also tries, in the first, to establish a theory of the nature of spirits, and the mode in which they appear. Even those who disbelieve entirely in apparitions, will find these works of great interest, because they will show him with how much appearance of truth many of the most remarkable cases are related by several witnesses of respectable character, who had not previously believed in the reality of such appearances, and under circumstances which, in ordinary cases, would be considered conclusive. Jung made himself known, also, by his numerous works on medical subjects, the veterinary art, political economy, &c. He was, moreover, one of the most successful operators for the cure of the cataract. "Already has he," says Matthisson, in his Letters (Zurich, 1795), "restored sight to more than 2000 poor blind people, not only gratis, but, in many cases, with the addition of pecuniary assistance." Göthe, in his *Aus Meinem Leben*, second volume, pages 378 and 489, gives a fine character of Jung.

JÜNGER, John Frederic, born 1759, at Leipsic, was first apprentice to a merchant, afterwards studied law, and, at a later period, devoted himself entirely to belles-lettres. He became tutor to two princes, and, in 1789, was appointed poet of the court theatre at Vienna; but, in 1794, was obliged to maintain himself solely by his writings. He was extremely diligent, yet his gains were very little: this and his lonely life rendered him subject to fits of deep melancholy, in which, as has been the case with other writers, he produced his gayest works. These were comedies. He wrote a great deal, and died 1797. His comedies have been published in three collections—*Lustspiele* (in five volumes, Leipsic, 1785—1790), *Komisches Theater* (Leipsic, 1792—1795, three volumes), and *Theatralischer Nachlass* (Ratisbon, 1803—1804).

JUNGFRAU (German, meaning virgin); a high mountain, in the canton of Berne,

Switzerland, the highest peak of which—the Jungfrauhorn—is 13,720 feet high, and was first ascended in 1811. The Jungfrau is one of the most magnificent mountains of Switzerland, and is covered with enormous masses of snow and glaciers. (See *Alps*.)

JUNIN, BATTLE OF. This engagement took place, Aug. 6, 1824, on the elevated plains of Junin, near the lake of Reyes in Peru, when the royalists, under Canterac, were beaten by Bolivar and the united Peruvian and Colombian forces. The combatants fought hand to hand, with lance and sabre, those engaged being cavalry only. This affair was but a prelude to the decisive battle of Ayacucho, which soon followed, and accomplished the final overthrow of the royalist party.

JUNIPER; a genus of plants having imbricated, scale-like leaves, closely allied to the cedar and pine, but differing in having the scales of the cone united, and forming a little berry. The *juniperus Virginiana*, commonly called *red cedar*, is frequent throughout the U. States, from near lat. 45° to the point of Florida, and westward as far as the Rocky mountains. It does not attain large dimensions, ordinarily not exceeding 30 feet in height, but is highly esteemed for the durability and lightness of the wood, which is employed in the upper part of the frames of vessels, for posts, &c., and is also an article of export to England. So little regard has been paid to the preservation of this tree, and such has been the demand for the timber, that it is now not easily obtained, and is becoming scarcer every day. As is the case with others of our forest-trees, the farther south and the more barren the soil in which it grows, the better is the quality of the wood. The cedar apples, frequently used in the U. States as a vermifuge, are excrescences formed by insects on the branches of this tree. The red cedar, in many places, appears as the pioneer of the American forest, fixing upon dry and exposed situations, and fostering beneath its shade young trees of various species, till it is finally overtopped by them, and in its turn disappears. The common European juniper (*J. communis*) is naturalized in some parts of the U. States, and is said to be really native in Canada. The *J. prostrata*, distinguished from the preceding by its larger and oblong berries, is a trailing shrub, covering often a considerable extent of ground, and inhabiting Canada, and those parts of the U. States north of lat. 42°. The *J. barbadensis* inhabits Florida, and other species are found on

the Rocky mountains. The wood of the *J. Bermudiana* is exported from the Bermudas, and, among other uses, is employed in the manufacture of black lead pencils. The berries of the *juniperus communis* are made use of to impart their peculiar flavor to spirit, constituting *gin*. They are also used by brewers, to give pungency to the lighter kinds of beer. In some parts of Europe, they are roasted, ground, and used as a substitute for coffee. They are also used in Sweden and in Germany as a conserve, and as a culinary spice, and especially to give flavor to sour-croust. Like all plants of the terebinthinate class, they have a decidedly diuretic property, and they are much used as diuretic medicines. The oil of juniper, if mixed with nut-oil, forms an excellent varnish for pictures, wood-work and iron, which it preserves from rust. From the bark exudes a resinous gum, known by the name of *gum sandarach*. It is in small, yellow pieces, very brittle and inflammable, and of a pungent, aromatic taste. When finely powdered and sifted, it constitutes the substance so well known under the name of *pounce*. It is also used by painters in the preparation of varnish, especially of the kind termed *vernix*.

JUNIUS. The Letters of Junius first appeared in Woodfall's Public Advertiser, from which they were copied into most of the other journals of the time. The earliest under this signature bears date Jan. 21, 1769; the last, Jan. 21, 1772. After they were completed, they were collected (the collection including also those signed *Philo Junius*, with the letters of sir William Draper, and those of Horne to Junius), and published by Woodfall, with a dedication to the English nation, and a preface by the author. Besides the letters signed *Junius*, others by the same author were published in the same paper, under the signatures of *Poplicola*, *Atticus*, *Lucius*, *Brutus*, *Nemesis*, *Veteran*, &c., relating to different subjects, but all marked with the same boldness, severity and passion which characterize the former. These appeared between April 28, 1767, and May 12, 1772, and are given in the younger Woodfall's edition as the Miscellaneous Letters. Although 60 years have elapsed since the publication of these extraordinary papers, we have as yet no positive proofs to decide the question who was the author. The most prying curiosity, and the most industrious ingenuity, have been at work to collect circumstantial evidence on this point, and volumes have been written about it; but, if we may believe a state-

ment which appeared in the London Globe a few years ago, the author is a person who had not then been named in all the controversies respecting these letters. "Five letters, deposited in the archives of the Grenville family, at Stowe, establish beyond a doubt," says the Globe, "the real author of Junius. That individual was politically connected with Geo. Grenville, from whom these autograph proofs have descended to their present possessor. The venerable statesman (lord Grenville, son of G. Grenville), nearly allied to the duke of Buckingham (grandson of G. Grenville), has requested the discovery should not be published during his life." It will be seen that one of the recent writers on this disputed subject has suspected the author to have been lord Temple, the brother and political friend of Geo. Grenville. Butler (*Reminiscenses*, first series, letter on Junius), speaking of the copy which the author ordered of his publisher "bound in vellum," also says, "Who is the possessor of this copy? The reminiscent thinks it was not unknown to the founder of a noble house, to which the public owes an edition of Homer which does the nation honor" (referring, doubtless, to the edition of Oxford, 1800, *impensis DD. Buckingham et Grenville*). A writer in the Edinburgh Review (vol. 43, article *On the Author of Eikon Basilike*) says, "A simple test ascertains the political connexions of Junius: he supported the cause of authority against America with Mr. Grenville, and maintained the highest popular principles on the Middlesex election with the same statesman: no other party but the Grenvilles combined these two opinions." Junius, we may add, was also in favor of triennial parliaments, and opposed to abolition of the rotten boroughs. It is likewise evident, from his language, that he was a man of rank and fortune: this appears not only from his tone and manner, but from his express assertions: "My rank and fortune place me above a common bribe;" and to one of Woodfall's letters concerning the profits arising from the sale of the letters, he replies, "I am far above all pecuniary views." Lord Eldon declared in parliament that, if not a lawyer, he must have written in concert with the ablest lawyers; but, independently of his own declaration to Woodfall, "Do not injure me so much as to suspect I am a lawyer; I had as lief be a Scotchman,"—the great English lawyer Butler asserts that Junius commits gross inaccuracies in his legal phrases. Several inci-

dental expressions, as well as his general tone, his intimate knowledge of persons and characters, show him to have been a man beyond middle life. He was evidently acquainted not only with the court but with the city (which was less usual in those days); with the history, private intrigues, and secret characters of the great; with the management of the public offices, with the proceedings of parliament (not then, as since, public); and also with the official underlings, through whom he sometimes condescends to lash their superiors. With this extensive information, he united a boldness, vehemence and rancor, which, while he spared no one, stopped at nothing, and rendered him an object of terror to those whom he attacked. To use his own language, "he gathers like a tempest, and all the fury of the elements bursts upon them at once." "In rancor and venom," said Burke in the house of commons, "the North Briton is as much inferior to him as in strength, wit and judgment. King, lords and commons are but the sport of his fury." Grafton, Bedford, Blackstone and Mansfield seem to be objects of personal resentment. Chatham and Camden are fiercely attacked in some of his earlier letters, though his tone in respect to them was changed in the latter part of his correspondence. His style is severe, concise, epigrammatic and polished; his reasoning powerful; his invective unsparing and terrible. Public suspicion, at the time, was fixed most strongly on Burke and Sackville; at a more recent period, the opinion that sir Philip Francis was the author, gained many adherents. Among the many other shadows who have been raised are Charles Lloyd, a clerk of the treasury, and private secretary to Mr. Grenville (doctor Parr thought him the author; but he died three days after the last letter appeared); Roberts and Dyer, who died before the letters were finished; Hamilton (single-speech); Butler, bishop of Hereford (whom Wilkes suspected); the reverend Philip Rosenhagen; general Charles Lee, who, in conversation, once gave out that he was the author, and whose pretensions are supported in a work by Girdlestone; Wilkes; Hugh Macauley; Boyd, a writer of some talent (see Campbell's *Life of Boyd*); Dunning (lord Ashburton), who was solicitor-general at the time; Delolme; Glover; Horne Tooke, &c. Burke was strongly suspected in his day, but he spontaneously denied it; and, apart from internal considerations drawn from his temper,

style and turn of thinking, it is sufficient to observe that, on several points, Burke and Junius were in direct opposition to each other. The former was a friend of Rockingham, the latter of Grenville; on the American policy and triennial parliaments, they were at variance; and Burke knew nothing of city politics, with which Junius was so familiar. The opinion that sir Philip Francis (died 1818) was Junius, has found many partisans, and was ingeniously supported in Taylor's work—*The Identity of Junius with a celebrated living Character established*. The arguments are drawn principally from external considerations: his absence on a journey to the continent coincides with an interruption in the letters; his departure for India with a high appointment, with their cessation; his receiving that appointment, without any apparent cause, just after being dismissed from the war-office; his station in the war-office, with all the details of which Junius is so familiar; his knowledge of speeches not reported; coincidences of thought and expression between passages of the letters and of speeches of lord Chatham, reports of which had been furnished by Francis, and with his own speeches, made after his return from India; peculiar modes of spelling, and of correcting the press; resemblance of hand-writing—are also brought forward to establish the identity. But the internal argument is against the supposition: Francis was but 27 when the first letters were written, and he never displayed, before or after, any proofs of a capacity or knowledge equal to the compositions of Junius. These circumstances have led to an hypothesis that, although he was not the author, he might have been the amanuensis of Junius. Another candidate, whose claims are much more powerful than any previously mentioned, is lord Sackville (at one time lord Geo. Germaine, and father of the present duke of Dorset). Sackville was strongly suspected at the time. Sir William Draper divided his suspicions between him and Burke, but finally fixed them on the former. His rank, fortune, temper and talents concur to render it probable; the friends and enemies of Sackville and Junius are the same, and their political principles coincide. Sackville's unmerited disgrace is well known; his hostility to the king may have arisen from having been forbidden the court; Mansfield was a crown-officer at the time of his trial; Bedford was a connexion, and on bad terms with him; Grafton was a witness

against him; Granby was second in command at Minden, and concurred in effecting his disgrace; Barrington was the organ of his dismissal. This opinion has been maintained in Coventry's *Critical Inquiry* (London, 1825), and, with additional proofs, in Junius Unmasked (Boston, 1828); but, although many striking coincidences have been pointed out, the proof is by no means complete in favor of this hypothesis. In the *Posthumous Works of Junius* (New York, 1829), with an Inquiry respecting the Author, the letters are ascribed to Horne Tooke. A late writer has started the hypothesis that lord Chatham was Junius (*Essay on Junius and his Letters*, by B. Waterhouse, 8vo., Boston, 1831). A still more recent writer has made an ingenious attempt to show that lord Temple, brother of Geo. Grenville, was the author of these celebrated letters. The fact that Grenville was the favorite of Junius, has often been mentioned, and it has also been suspected, for various reasons, that lord Temple was, in some way, connected with Junius; Butler (without suspecting Temple) mentions that the letters appeared to be written in a lady's hand, and that Wilkes once received a card from old lady Temple, in her own hand, which they agreed in thinking resembled the hand-writing of the letters. We have already cited a remarkable passage from the *Edinburgh Review* on the subject of Junius's political connexions, and the statement from the *Globe* seems to point out his family. Geo. Grenville has himself been suspected to be Junius; but it is sufficient to observe that he died in 1770, when but a small part of the letters had appeared. The authorship is ascribed to lord Temple, in the work to which we refer, by Mr. Newhall, of Salem, in Massachusetts (*Letters on Junius*, Boston, 1831), on the ground of the well established facts, that his political and personal connexions were the same; that the opinions of Junius, in regard to Chatham and some other persons, differed at different times; and that this difference agrees with the changes in lord Temple's feelings towards those individuals; that the political principles of the two coincide: he also endeavors to show that Temple's talents, age, circumstances, style of writing and thinking, of which he gives specimens, render his hypothesis probable; and we would add, that, if it is not the true one, it is certainly embarrassed with fewer difficulties than any which has come to our knowledge; but *Non nostrum tantas componere lites*. The most valuable editions of Junius are

those of Heron, a pseudonym (London, 1801, of which it is strange that we find no account in the English reviews of that day), and particularly of Woodfall, with notes and illustrations. A French translation by Parisot, with a commentary, was published in Paris, in 1823.

JUNKS; large, flat-bottomed vessels, from 100 to 150 tons burden, used by the Chinese. They have three masts, and a short bowsprit placed on the starboard bow. The masts are supported by two or three shrouds, which, at times, are all carried on the windward side. On the fore and main-mast is a sort of lug-sail, of cane or bamboo. Similar to these junks are the Japanese barks, which are 80 or 90 feet long on one deck, but have only one mast, that carries a square-sail, and forward one or two jibs, made of cotton.

JUNO (with the Greeks, *Here*), the highest and most powerful divinity of the Greeks and Romans, next to Jupiter (the Greek *Zeus*), of whom she was the sister and wife, was the daughter of Kronos (Saturn) and Rhea Arcadia. Argos and Samos claimed the honor of her birth. According to Homer, she was educated by Oceanus and Thetis; according to others, by the Hours. Her marriage with Jupiter, on the island of Crete, was honored by the presence of all the gods. According to Homer, Jupiter embraced her without the knowledge of their parents; and others say that he subdued her by artifice, on the island of Samos, and there married her. After he had loved her for a long time without any return, he once saw her without her attendants, wandering on the mountain of Thronax, and afterwards lying down to rest. He collected a dark cloud, and threw himself at her feet in the form of a cuckoo, trembling with wet and cold. She compassionately took the poor bird under her mantle; but the god immediately assumed his true form, and, in order to enjoy her, promised her marriage. Their marriage was not fortunate. The proud, ambitious and jealous Juno could not bear the frequent infidelities of her husband; but he treated her with all that severity which, in ancient times, the husband was accustomed to use towards the wife. The ancient poets, particularly Homer, give us many instances of this kind. When Juno had driven Hercules, the favorite of her husband, to Cos, by a storm, Jupiter was so angry that he bound her hands and feet, loaded her with two anvils, and suspended her from Olympus. No one of the other gods could help her. During

the Trojan war, having lulled Jupiter to sleep, in order to give the victory to the Greeks during his slumbers, she escaped with difficulty from the blows which Jupiter aimed at her when he awoke. In the oldest poetry, Juno is described as a divinity hostile to Hercules, appearing unpropitious to him, even at his birth, and opposing him afterwards in all his undertakings. Homer generalized this idea, and represented her as a malicious goddess, of whom he made use whenever a plan was to be interrupted, or an enterprise defeated. He describes minutely the art which Juno used to assist the Greeks, contrary to the command of her husband. She is also the malicious persecutor of the objects of Jupiter's amours (e. g., Latona, Semele and Alcmene), and of their children by him. Among the latter, Hercules and Bacchus suffered most. The Thebans likewise felt the effects of her hatred, because Hercules was born among them. She persecuted Athamas and his family, because he had educated the young Bacchus. All who assumed to themselves, or attributed to others, a superiority to her, experienced her vengeance. The beauty of Juno is elevated, majestic, and calculated to inspire awe: she wanted the soft, insinuating and heart-touching beauty of Venus. In the Trojan war, she was the protector of the Greeks. She sometimes mingled herself in the combat: thus, e. g., Jupiter once allowed her to remove Mars, the protector of the Trojans, from the battle. No one of the goddesses dared contend with her in fight. Diana once attempted it, but her cheeks felt the strength of the mighty Juno. Her children were Hebe, Ilythia, Mars and Vulcan. The last, however, she is said to have borne without the assistance of Jupiter, in revenge for his producing Minerva from his own brain. According to some writers, she was also the mother of the monster Typhon; but others assign him a different origin. Four different ideas are associated with Juno. According to the Orphic doctrines, she was the symbol of the lower air, as Jupiter was of the upper air, or of the air in general. With this was joined another idea, derived from the Pelasgic religion at Samos, which represented her as the queen of the gods. To this was added the Phœnician notion; the Venus Urania, by which name the Phœnicians worshipped nature, being confounded, in Greece, with Juno. As such, she was particularly worshipped at Argos. Finally, the poets gave her the character of a malicious god-

dess, who counteracted the projects of Jupiter and other gods, or of heroes and men. She was worshipped in all Greece, but her principal seats were at Argos, in the vicinity of which was her famous temple, the Heraeum, and at Samos, the place of her birth and marriage: hence one of her epithets was *Samia*. The Samian Juno was represented, on coins, with a crescent on her head, and her hands resting on two wands. The companions of Juno were the Nymphs, Graces and Hours. Iris (q. v.) was her particular servant. Among animals, the peacock, the goose and the cuckoo were sacred to her. Her usual attribute is the royal diadem, formed like a long triangle. She often has a veil bespangled with stars, either as a covering for her head, or hanging loosely behind her. On a gem in the collection of Stosch, she appears in calm majesty, seated on a throne, having at her back, on each side, the sun and moon, and over her head the planets, to signify that she is the queen of heaven. She is drawn in a carriage by two peacocks. The statues of Juno, among the ancients, were not very numerous, and even during the time when sculpture was in its most perfect state, the Greeks possessed no particularly celebrated statues of her. Most of the portraits of Juno, on gems, are by the Greek artists of the time of the Roman emperors. Juno had the same character among the Romans as among the Greeks. They called her generally *Juno Regina* (*Regia*), *Pronuba Matrona* (as protector of betrothed virgins), *Lucina* (q. v.), and *Ilythia*. She had several temples in Rome. The first days of every month, and the whole of June, were sacred to her. (On the planet of this name, see *Planets*.)

JUNTA (*Spanish*, an assembly), in Spain; a high council of state. There were, formerly, but two—the royal junta of commerce, the mint and the mines (*real junta general de comercio, moneda, minas y dependencias de extranjeros*), and the board of the tobacco monopoly (*real junta de tabaco*). The assembly of the estates of the kingdom was called the *cortes*. But, in 1808, Napoleon summoned together the notables of the kingdom, under the title of a *junta*, to the number of 150 members; of whom 50 were to represent the spiritual, and 100 the secular interests of the country. Only 90 members, in fact, appeared, and these without sufficient powers—a circumstance, however, which embarrassed him little. The junta was organized June 15, 1808,

under the presidency of D'Aganze, minister of finance, and unanimously accepted the new constitution. But when king Joseph was obliged to leave Madrid, August 1, a new junta was assembled, composed of the principal leaders of the insurrection. It consisted at first of 26 members. The count Florida-Blanca was its president. Its number was afterwards fixed at 44. The advance of the French drove this junta to Seville, whence they subsequently retired to Cadiz. Besides this central junta, there was, in every province not subjugated by the French, a provincial junta, subordinate to it. (See *Spain*.)—In English, the word *junto* is used as a term of reproach, for a cabal or faction.

JUPITER (in Greek, *Zeus*); son of Saturn and Rhea. The Greek name of his father being Kronos, he is sometimes called *Kronion* and *Kronides*. He is the brother of Vesta, Ceres, Juno, Neptune and Pluto. In the different periods of Grecian history, very different notions were entertained respecting this god. The Pelasgi honored him, from the most remote times, as the symbol of nature. His oracle was at Dodona, and hence he is called the *Dodonian*, *Pelasgic king*. In the Orphic religion, Jupiter was a physical symbol, and denoted the upper air, the æther; and Juno, the symbol of the lower air, was connected with him as sister and wife. Hence the following Homeric fable is explained. Juno, Neptune and Apollo wish to bind Jupiter; but Thetis calls the hundred-armed Briareus to his assistance, who, by his mere presence, prevented the gods from carrying their plot into execution (the contest of the elements, in which the æther would have been in danger of being overcome, had it not at length gained the victory through its strength, Briareus). Thus also we may explain, symbolically, the fable, that Jupiter once boasted that he would let down a chain from heaven, upon which all the gods might hang, and still would not be able to drag him down; but he would draw them, together with the earth and sea, up to himself, and then, winding the chain around the top of Olympus, would leave them swinging in the clouds (the combined efforts of all the lower elements are not sufficient to draw down the æther from its seat). From the symbol of the æther was evolved the poetic conception of Jupiter, as ruler of the æther and the upper air. In reference to this, he has the following surnames, the *lightning-loving*, the *cloud-collecting*, the *high-seated*, the *far-*

seeing, the *loud-thundering*, the *cloud-compelling*. A higher idea makes him the father of gods and men, as indeed Homer calls him. Still this is not the idea of a supreme being, the creator of the world, which first arose at a later period. The more common idea, at this time, was that of Jupiter Herceus, who, being only the governor and protector of houses, families and their possessions, or of a whole people and a particular territory, was of course nothing more than a local deity. He is also the ruler and director of the fates of men, and holds in his hand a balance, in which he weighs out to each one his proportion of good and of evil. Two urns also stand in his palace; in one of which is evil, and in the other good. Sometimes he gives to mortals a lot mingled from both; sometimes drawn from one alone. But, nevertheless, he is himself subject to Fate, an unknown being, wrapped up in obscurity. He is the wisest of gods and men. Minerva sits ever at his side. He forms his purposes without the assistance of any one, and to whomsoever he does not disclose them, they remain inscrutable. He aids man with his counsel, and from this is called the *giver of good advice*. He is true; his promises are irrevocable and infallible. He knows the fates of men. He hears those oaths of mortals which they swear by him, and punishes perjury in the severest manner. All injustice and cruelty is hateful to him. Whoever will not listen to a suppliant offender (*Hiketes*), and forgive him, him Jupiter (*Hiketesios*) punishes. He is kind and benevolent, and wishes men to be so likewise to each other. Hence he is called *Jupiter Xenios* (the protector of strangers). These ideas of Jupiter, which are found in Homer and in the poets of his time, although as yet limited by local circumstances, were in after times more fully unfolded, in proportion as the intellectual cultivation of the Greeks increased, and a purer philosophy began to be diffused. With this are connected those historical traditions, according to which Jupiter was born and bred upon mount Ida, in the island of Crete; for an oracle of Uranus and Terra had counselled Rhea to bring forth her son upon that hill, lest he should be devoured by Saturn. Different traditions assign his birth to different places; some say that it occurred at Messene, others at Thebes, Olenus in Ætolia, Ægæ in Achaia, upon the hill Lyctos or Dictæ in Crete, on mount Lyceus in Arcadia (where the cavern was shown in which his mother bore him). Equally different

are the accounts respecting the place where he was educated. According to Homer, Terra educated him, and concealed him, during the night, in a cave of the woody mountain Argæus; doves brought ambrosia to him. The Arcadians and Messenians say that he was educated by the nymphs, who received him from the Curetes, and bathed him in the fountain Clepsydra. According to other accounts, his mother intrusted the child to the care of the Curetes, and these gave him to the nymphs Ida and Adrastea, to nurse, whilst they themselves, by a continual clashing of their shields, prevented Saturn from hearing the cries of the child. Instead of Jupiter, Saturn is said to have swallowed a stone swathed in a goat's hide and anointed with honey, which they gave him. According to others, he was educated by the daughters of the Cretan king Melissus, Amalthea and Melissa, who nursed him with the milk of the goat Amalthea, one of whose horns Jupiter changed into the horn of plenty. He grew very rapidly. Whilst he was yet but a year old, he was already able to afford assistance in the execution of a scheme which his mother had formed against his father. From Metis (goddess of wisdom), Jupiter received an emetic which he gave to Saturn. The potion worked so well, that he threw up all the children which he had swallowed, even to the stone which he had swallowed last. This stone Jupiter deposited at the foot of Parnassus, near Pytho, for a memorial. He proceeded now to dethrone his father. The oldest sons of Uranus and Terra, the hundred-handed giants, and the Cyclops, were fast bound in Tartarus, and the monstrous Campe kept guard over the prisoners. Jupiter killed the monster by the advice of Terra, and set free the prisoners. Out of gratitude, they armed Jupiter with the lightning, which, until that time, had lain concealed in the earth; Neptune with the trident; and to Pluto they gave a helmet which rendered the wearer invisible. He then dethroned his father, and castrated him with the same weapon which the former had before used on Uranus for a similar purpose. The Titans were not contented with this change of government, and there arose a 10 years' war between them on one side, and the children of Saturn and the hundred-handed giants on the other. (See *Briareus*.) The theatre of battle was the hills of Olympus and Othrys. From the latter fought the Titans, from the former the new gods. At length the latter conquer-

ed, and the Titans were hurried down to Tartarus. Jupiter, having now obtained full possession of the sovereignty, shared his father's kingdom by lot with his brothers; he himself receiving the heaven and the earth, Neptune the kingdom of the sea, and Pluto the infernal regions. But fearful monsters threatened the new gods with destruction. Terra, angry that her children, the Titans, should be kept imprisoned in the depths of Tartarus, gave birth to the dreadful giants who rebelled against the new gods. These were conquered by the aid of Hercules. But Terra, still retaining her anger, bore to Tartarus, Typhæus (Typhaon, Typhon), the most frightful of all the monsters, whom Jupiter conquered with the greatest difficulty. According to some, Jupiter pursued him with his lightnings and sickle, until, at length, on a hill called *Casius*, they joined battle. Typhæus wound about Jupiter with his dragon folds, flung him upon the ground, and with his own sickle cut out the tendons of his hands and feet, dragged him into the Corcyrean cavern, and stationed a dragon to keep watch over him. But Mercury and Ægipan (a son of Jupiter and Æga, Pan's wife, or a foster brother of Jupiter) freed Jupiter by stealth from the dragon, cured him, and set him upon a winged chariot, from which he hurled his lightnings down upon Typhæus. At Nisus and upon Hæmus, they fought with each other; but at length Jupiter gained the victory, and crushed the bleeding monster beneath Ætna, or the island Pithecusa. Jupiter now found himself in quiet possession of the sovereignty, which was solemnly surrendered to him by the other gods, to each one of whom he therefore gave a reward. From this time he was king of the gods—an idea which seems to have originated when Greece had as yet only her smaller kings. And even as these often chose from among themselves a universal king or governor, who should hold the first rank (as, for example, Agamemnon in the Trojan war), so also, according to the representations of the poets, did the gods. They chose Jupiter their king and leader: he had therefore the right, on important occasions, to assemble them in his palace. In the Trojan war, he forbade the deities from taking further part in it, and threatened to hurl any transgressor of his command down to Tartarus. The king Jupiter is formed, by Homer, after the exact fashion of the Grecian kings of the period, and his whole character is painted in exact accordance with the characters of

the old Greek heroes—rude, wild and passionate. A scourge is even ascribed to him, with which, as king, he may administer chastisement. This idea was borrowed from the Egyptians, amongst whom the scourge was an emblem of kingly power. As ruler of the earth, Jupiter particularly directed his attention to the race of men, which he exterminated, because it had become corrupted and vicious, and then created another and better from the trees. He caused Prometheus, who had stolen fire from heaven for men, to be bound by Vulcan on the Colchian Caucasus, whilst his liver was to be ever preyed on by a vulture. He killed Esculapius with his lightnings, because, by his arts of healing, he had unpeopled the realm of Pluto; and when Phœbus, to avenge his son, slew the Cyclops who had forged his lightnings, he banished him a long time from heaven to earth. He punished with death Salmoneus, who imitated his thunder; Idas, who wished to slay Pollux; Capaneus, who was the first to scale the walls of Thebes; and afterwards, also, the Curetes, who, at the persuasion of Juno, had concealed the young Epaphus, and the Achaian river-god Æsopus, who had endeavored to regain his daughter, whom Jupiter had carried off. He went through the world, punishing the wicked, and rewarding the good. His peculiar servants were the Horæ and Mercury. Ganymede, who took the place of Hebe, was cup-bearer to him and the other gods. His palace is on Olympus. Themis or Dike sits on a throne beside him. His first wife was Metis, a daughter of Oceanus, the wisest of all the deities. But when Uranus and Terra foretold to him that she would bear a child who should deprive him of his sovereignty, he devoured her during her pregnancy; and thence it came to pass that Minerva, some time after, was born from his head. His second wife was Themis, a daughter of Uranus and Terra, who bore him the Horæ and Parcæ. His third wife was Juno. Among the goddesses, he also loved Dione, a daughter of Æther and Terra, and was by her the father of Aphrodite. At a later period, Mnemosyne, daughter of Uranus and Terra, bore him the nine Muses, he having spent nine nights in her embraces; Ceres, his sister, became by him the mother of Proserpine; Eurynome, daughter of Oceanus and Thetis, became mother of the Graces; Latona, daughter of a Titan and Phœbe, mother of Apollo and Diana. Among his mortal mistresses were Danaë, daughter of

Acrisius, and mother of Perseus; Niobe, daughter of Phoroneus, the first one among mortals whom Jupiter loved; mother of Argus, the third king of Argos; Maia, daughter of Atlas, and mother of Mercury; her sister Taygete, mother of Lacedæmon, and the third sister Electra, mother of Dardanus; besides these were Semele, daughter of Cadmus, and mother of Bacchus; Europa, daughter of Phœnix or Agenor, and sister of Cadmus, mother of Minos, Sarpedon and Rhadamanthus; Callisto, daughter of Lycaon or Nycteus, mother of Arcas; Io, daughter of Inachus or Argus Panoptes, mother of Epaphus; Leda, daughter of the Ætolian king Thestius or Glaucus, mother of Helen and Pollux; Ægina, daughter of the river-god Æsopus and mother of Æacus; Antiope, daughter of Nycteus, and mother of Amphion and Zethus; Elara, daughter of Orchemenus, and mother of the giant Tityos. The last of his mistresses was the beautiful Alcmena, the mother of Hercules. The Nymphs are also regarded as the daughters of Jupiter. At a later period, by his rape of the beautiful Ganymede, he gave the Greeks the first example of the love of boys. Jupiter had many oracles in Greece; for instance, at Dodona, at Olympia, although the latter after a short time ceased, and one in a holy grotto on mount Ida in Crete. His most famous temple in Greece was that of Olympia or Pisa. He was also especially honored at Dodona in Epirus, on mount Casius in Egypt, in the city Nemea in Argolis, on Ætna, on mount Athos and Dictæ, and many other places. In this way we have many of the surnames of Jupiter explained. By the Romans he is called *Feretrius*, *Elivius*, *Stator*, *Capitolinus*, and the like. His most usual attribute is the thunderbolt, which he either holds himself in his hand, or which the eagle bears at his side. He is always attended by the eagle, and sometimes by the beautiful Ganymede. He is usually represented with a crown and sceptre. His countenance displays seriousness and majesty, mingled with benevolence and serenity. Of the statues of Jupiter, we have received but a few from antiquity, and none of the first rank. By far the most beautiful representations of him are found upon gems, which present to us the king of the gods in the different scenes of his history; sometimes only the bust, sometimes the whole figure; sometimes alone, at others grouped with other figures. That celebrated masterpiece of Grecian art, the statue of Jupiter

Olympius, by Phidias, is indeed lost to us. But it is highly probable that in the excellent heads on gems, the principal traits of it are preserved. Upon a gem in the cabinet of Stosch, the beholder admires the deep seriousness mingled with a heavenly mildness, which is spread over his whole countenance, and the beautiful growth of hair falling down, not like the crisped locks of youth, but in gentle undulations of a ripe, manly age, closely resembling the mane of the lion, the king of beasts. Upon another gem, Jupiter is enthroned in an arm-chair, as king of heaven and earth. The moon and stars are round about him, the globe is in his right hand, the sceptre in his left, and a diadem on his head, to point him out clearly as the supreme ruler. The lower part of the body is covered. The eagle at his feet sits looking up to him, awaiting his commands. When Jupiter stands, he is generally naked, because he is then occupied in a way which makes clothing an incumbrance. Bulls and eagles were usually offered to him; the oak and beech-trees were sacred to him. In the second month of every fifth year, the Olympic games were celebrated in honor of him. Besides the Homeric and Orphic hymns in honor of Jupiter, we have one by Callimachus and Cleanthes. We would remark that the ancients reckoned many different Jupiters. Varro gives 300 of that name, and Cicero three, as the most distinguished—the sons of Æther, of Cœlus, and of Saturn. To the last, the actions of all the rest were finally attributed.

Jupiter Ammon. Sufficient has been said for the limits of this work, on this great deity of the Egyptians, in *Ammon*, and in *Egyptian Mythology*, in the article *Hieroglyphics*. We will only add, that in the Transactions of the American Philosophical society (vol. 4, new series, No. 1), a publication not yet out when the above-mentioned article was prepared, Mr. Hodgson directs the attention of the etymologist for the origin of the word *Ammon* to the Berber word *Aman*, water (the very contrary to *āppos*, sand, the word from which *Ammon* is generally derived). (See also Champollion's *Tableau Général*, prefixed to his volume of plates, No. 39, a.)

Jupiter, in astronomy. (See *Planets*.)

JURA; one of the Hebrides, or Western Islands of Scotland, situated to the north-east of the island of Islay, and opposite to the district of Knap-dale, in Argyleshire, to which county it is annexed. It extends fully 26 miles in length, and is on an average 7 broad, containing 58,500 Scots

acres, of which only 3000 are arable. It is the most rugged of the Western Isles, being composed chiefly of huge rocks, piled on one another in the utmost disorder, naked, and incapable of cultivation. The mountainous ridges terminate in four similar peaked mountains, called the *paps of Jura*. The only crops are oats, barley, potatoes and flax; the chief manure is the sea-weed, which is cast ashore. There is only one small village, called *Jura*. The Gaelic is the only language spoken in the island. Population, 1264.

JURA; a chain of mountains about 60 leagues in length, and 15 in breadth. It is a continuation of the Savoy Alps (q. v.), extending from the Rhine, near Bâle, to the Rhone, about 10 miles below Geneva. By the low range of mountains in the Pays de Vaud, the Jura is connected with the lofty Alps of Berne. It stretches towards the north in several long ridges between France and Switzerland; the ridges then separate, and the eastern one, which is the principal, is continued through Neuchâtel and the canton of Soleure, and terminates on the eastern side of the Frickthal, in the canton of Aargau, on the Rhine, where, on the German side, the Schwarzwald or Black Forest is a continuation of it. The western branch extends farther to the north, and takes the name of the Vosges. Jura has neither the pointed summits nor the perennial snows of the highest peaks of the Alps. One of the highest peaks, mount Reculet, is elevated 5310 feet above the level of the sea, and the Dole, 5185 feet. The French department of the Jura, a portion of Franche-Comté, on the Furieuse and the Doubs, furnishes silver, copper, iron, lead, marble and salt. The chief town is Lons-le-Saulnier.

JURGURA (anciently, *Mons Ferratus*); a mountain of Africa, in Algiers, supposed to be the highest in Barbary; 24 miles S. of Dellys, 60 S. E. of Algiers. It is at least 24 miles long; and, if we except a pool of good water, bordered round with arable ground, that lies near the middle of it, the whole, from one end to the other, is a continued range of naked rocks and precipices. In the winter season, the ridge of this mountain is always covered with snow.

JURY. [Written by a civilian.*] The

* This article, as far as the break on page 283, is translated from the German *Conversations-Lexicon*, and was written by a German civilian accustomed to the juridical practice of countries where the civil law prevails, and where the trial by jury is imperfectly understood, and, if intro-

right of punishing is inseparable from the executive power in a state; but, since the penal authority has to decide respecting the property, freedom and life of citizens, the executive or highest power may easily degenerate into despotism, and the relation of the citizen to the government into slavery, if it can punish at will. It consequently becomes an object to deprive the government of the will and power to punish unjustly. Now, since, in every case of punishment, a double question is to be answered—first, whether the accused committed the act with which he is charged, and, secondly, if he is guilty, what consequences do the laws attach to the deed, and what punishment must be inflicted—the executive power will be sufficiently restricted, if we leave it to answer merely the last question, and leave the decision of the first to a separate, independent authority. This can neither be limited to single individuals, nor to a permanent college. Both are too much subject to the influences of the supreme power. The mass of the people, alone, is not to be corrupted. But, since the mass of the people cannot sit in judgment, and it is also known how little impartial justice is to be expected from the multitude, when their own interest is concerned, this agency must be committed to sworn substitutes, chosen for single cases, or only for short periods, in order that the popular tribunal may not degenerate into an established office. These substitutes, as they are not determined beforehand, cannot become the object of corrupting influences, which, though they may find access with some, hardly can with all. In these views lie the foundation and essence of juries; namely, of the petty jury in England, and of the *jury de jugement*, in imitation of it, among the French. In the former country, the love of freedom proceeded still farther, and, on account of the mischief that may be produced by complaints, invented the grand jury, consisting, likewise, of sworn representatives of the people, whose function it is to decide respecting the admissibility of complaints, and whether, in conformity with them, a criminal prosecution is to be instituted against any one. Its counterpart existed in France till 1809, and, since that time, has been imperfectly administered. It has been retained, because it has been thought that the views of the continental jurists on this subject would be curious and instructive. The writer, it will be seen, considers the trial by jury almost solely with reference to criminal cases.—The remainder of the article was written by an eminent American jurist.

under the name of *jury d'accusation*. To this essential character of a jury are united several properties necessary to its perfection. (a.) Not only must citizens sit in judgment on citizens, but the greatest possible equality of rank is to be sought, between the judges and the party to be judged, in order that the interests of different ranks may not give rise to injustice, partiality, or false decisions. In England, where all ranks, below the hereditary peers, are by law equal, and without exclusive prerogatives of rank or birth, all persons not born peers of the land (for they, as an intermediate part of the hereditary government, between king and people, have their equals, and, consequently, their jury, only in the house of lords) are tried by the same jury. In the ancient German courts, which, in substance, were juries, the equality of birth between the judge and criminal was most strictly observed; not, however, so much that no inferior person could be judged by a higher, as that no higher could be judged by an inferior. (b.) The jurors cannot well be chosen otherwise than by a public officer—in England, by the sheriff. To guard against all danger of partiality and undue influence, the person arraigned has the right of rejecting a portion of the jurors empaneled. The right allowed to the prosecutor is more limited. In England, the former may [in capital cases] reject 20, and in crimes of high treason, 35. The public prosecutor cannot challenge any one without declared cause. (c.) A jury, which, in most cases, must consist of men of little education, cannot be guided in their conclusions by legal rules of evidence, but only by their general impressions from the whole train of circumstances; and, on this account, its verdicts are not proper subjects of revision. In England, trial by jury is extended even to civil cases, especially for settling certain matters of fact; for instance, of possession, of estimating the amount of damage, &c. (d.) All the operations, examinations, and other processes necessary in a criminal trial, are to be performed in the presence of the jury. To refer them for information to a protocol, or to the reports of an officer, would involve difficulties, and, at all events, leave them exposed to the errors which might arise from the subjection of the reporting officer to foreign influences, and thus defeat the essential object of trial by jury. With the French constitution, the trial by jury was spread on the continent, and excited, in many persons, high admiration. It has been proved by Feuerbach, in his classical

work on this subject (Landshut, 1813), that, in a political view, trial by jury has a value only in particular constitutions, in which its political advantages may induce us to overlook its defects, when considered merely in reference to criminal jurisdiction. Political objects make the trial by jury necessary in democracies. Intrusted to a single magistrate, or to a permanent authority, the criminal power would open an immediate avenue to sole dominion, or to aristocracy. Equally indispensable is it to a mixed constitution, like the English; for it would become either a pure monarchy, democracy or aristocracy, if the immense preponderance of the penal power should be committed solely to the monarch, or to one of the powers counteracting and restricting him, the people or the body representing the national sovereignty. On the other hand, it is apparent, that in a constitution where the monarch is absolute, the political advantage of a jury disappears. No constitution, no personal freedom of individuals can, in such case, be defended by juries, since the ruler can abolish it at any moment, or, in particular cases, render it inefficacious by a special commission. The most eloquent example is that of France in late years. The establishment, moreover, of trial by jury in a pure monarchy, already confirmed by long permanence, is not only null, but superfluous, inasmuch as the ruler can gain nothing more by injustice, but may lose every thing. But how far does the trial by jury satisfy the demands which are made of criminal jurisdiction? How far is a certain determination of guilt or innocence to be expected of it? 1. Can we believe the juryman, who is accustomed to move only in the circle of common intercourse, can we believe him possessed of sufficient sagacity to look through the most complicated relations, which often occur in criminal trials, permitting neither aversion nor predilection to influence his verdict? Certainly not. But to attempt to abolish the evil by means of permanent jurors, who should acquire ability by practice, would be to destroy the essential character of juries. Add to this, that in the oral proceedings in the presence of the jurors, every means is afforded for the operation of sophistry, and the excitement of the passions, and that the various grounds of defence or accusation, often infinitely numerous, can in no wise be fairly examined and compared with each other—a process possible only when the judge forms his opinion from written documents. In every case,

the last impression of a jury will be the decisive one. The charge, by which, after the termination of the debates, the presiding judge, versed in the law, seeks to guide the deliberations of the jury, and aid their untaught judgment, may contribute, indeed, to remove this and the deficiencies remarked below, but the effect of it is very inconsistent with the object of jury trials; for it makes him, in most cases, master of the judgment. One may generally foretell, in England, the verdict of the jury from the charge of the judge. 2. Experience confirms it, and it lies in the nature of things, that the jury regularly hesitate, even against their conviction, to give a verdict of guilty, when it exposes the party to a punishment, in the public opinion, more severe than just. To common penetration, it is extremely difficult to separate the fact from its legal consequences. This evil is seen to be in some degree necessary, especially in England, where the criminal code has not kept pace with the times, and a very slight theft is punished with the halter. 3. The question of guilt or innocence is not one of pure fact, but also a legal question, and presupposes, in every case, a knowledge of criminal law. To be able to say whether any one has committed a violent robbery, it must first be known whether he has done the act which the accuser asserts, and, secondly, whether this act had those characteristics, which the laws require to constitute the crime. But if, to remedy this evil, the jury should be restricted to the question whether a certain act had been committed or not, its object would be destroyed, and the authority to which is committed the decision of the point of law would be left to its free will, since it might make that act any crime it pleased. In England, recourse has been had to the dangerous practice of allowing the jury, when they find the accusation in a legal view but partially founded, or regard the crime committed as less heinous than the one charged, to give a verdict partly of acquittal, partly of condemnation, such as guilty of manslaughter, but not of murder. If the jury agrees on the point of fact, but cannot remove their doubts respecting its legal character, they have to leave the decision to the judge. But will not the jury trust to their penetration more than is just? Does not the presiding judge become absolute? Some might, indeed, be inclined to make it a decided advantage of juries, that the accused is tried by judges who are his equals, and from whom, it would seem, may be expected a juster decision,

more conformable to his peculiar situation, than from others. But, in the first place, the poorer class of people, who, above all others, fill the annals of criminal trials, must be excluded from the jury by reason of their want of information and comparatively small interest in the public welfare, by which means that equality is, in most cases, destroyed (thus, in England, to be a juror, a person must have a certain income; the same is the case in France, where attention is also paid to particular circumstances of rank); so that, from the infinite gradations and varieties of property, education, opinions, and innumerable outward circumstances, instead of full equality, the greatest inequality often subsists between the jurors and the accused. The various means by which it has been attempted, in France, to remedy the defects of the jury, and which, nevertheless, have produced no better criminal jurisdiction, satisfactorily prove their entire insufficiency in this respect. (See *Assizes*, and *Appeal*.) I. *History of the Institution*. It has evidently been, from the beginning, a truly popular trial, and not, as Rogge has lately asserted (*Gerichtswesen der Germanen*, 1820), a modification of the ancient process of compurgation. These institutions—compurgation and jury—have, indeed, many external similarities, and may, in some cases, have become blended with each other; but, in their nature, they are entirely separate. This appears evident from the circumstance that, in England, juries and compurgations occur at the same time. Criminal actions against the clergy were prosecuted under the direction of the bishop, with 12 of the clergy as jurors, but were begun by the accused, with 12 compurgators swearing to his innocence, and commonly ended in his acquittal, till an end was put to this disorder by law, in 1576. (See Blackstone's *Comment. on the Laws of England*, vol. iv.) It has long been known in Germany, and has lately been proved by Feuerbach (*Betrachtungen über die Mündlichkeit und Oeffentlichkeit der Gerichtspflege*, 1821), that the most ancient constitution of the German laws, and in Bavaria as late as the fifteenth century, consisted in the men of the communes finding judgment under the guidance and protection of an officer. As there must be some fixed number, that of 12 is as good as any other, and has been preferred from time immemorial; but the agreement of the 12 jurors consisted, at first, in many cases and places, in the circumstance, that the votes of all the men present, and capable of giv-

ing an opinion, were asked, and the matter decided as soon as a majority of 12 votes was obtained for an opinion. One person could, therefore, cancel the vote of another juror, by declaring himself of another opinion, and commanding the juror to leave his seat. Some traces of this regulation are still to be found in England. In the house of lords, the whole body of nobles votes; but a valid condemnation is obtained only when a majority of 12 votes is declared for conviction. But in the courts of assizes, the place of absent jurors is immediately supplied from the people present, and if these 12 cannot agree, according to the original constitution, the trial must be by new jurors, who are chosen from time to time till a unanimous vote of 12 is obtained. In important causes in the county courts, all the freemen of the county were, in former days, summoned, which is termed judgment *per omnes comitatus probos homines*. (Reeves' *History of the English Law*, 1814, vol. i, 84.) But it was very naturally soon found better to summon only a fixed number of men to this service, and thus arose the number of 12, who could only unanimously give a valid decision. The oldest vestige of this change is found under Henry II, in the constitutions of Clarendon, in 1164, and of Northampton, in 1174. Contests about landed property, as well as criminal accusations, were to be decided by the oath of 12 respectable men of the neighborhood (*per sacramentum duodecim militum de hundredo, or liberorum legalium hominum de vicineto*). From this time, the trial by jury has remained essentially unaltered in England, and has gradually become the only form of process, partly by the abolition of the criminal courts which judged without jury, partly by the abrogation of the methods of criminal prosecution in which no trial by jury existed. Of the last, there remains only the pronouncing of punishment in the way of legislation, termed an *attainder* (*attinctura*), or *bill of pains and penalties*. There were, besides, several other ways of terminating a criminal trial without jury, but between which, not the accuser, but the accused, was entitled to choose. In the times of the Anglo-Saxons, the ordeals of red hot iron and boiling water were in vogue, besides which there was the consecrated bread. The clergy prepared a piece of bread or cheese, an ounce in weight, which was easily swallowed by the innocent, but which stuck in the throat of the guilty, and choked him. Of such a morsel, Godwin, earl of Kent, died in the reign

of Edward the Confessor; and, according as the accused was suspected or hated, it was well known how to prepare the morsel. Under the Norman dominion, this ordeal was supplanted by the wager of battle. The wager of battle (*vadiatio duelli*) was used even in civil cases, and, according to the most ancient custom, it depended on the accused, if the accuser had supported his accusation by witnesses, to choose whether he would have recourse to this means, or swear to his innocence with twice as many compurgators as the accuser had produced, though not above twelve. This was called *vadiatio legis* (wager of law). In civil causes, the wager of battle disappeared in the thirteenth century, when Henry II introduced into the assizes a trial by jury. But in penal prosecutions, on the contrary, it continued much longer. The accused is still asked how he will be tried; and, though the answer—"by the law of the land," or "by the country" (*per legem terre, or per patriam*)—has become a mere formality, yet, as late as 1819, a singular trial for murder took place, in which it stood at the option of the accused to challenge the accuser to the wager of battle. (See Kendall's *Appeal of Murder*, London, 1819, and *Appeal*.) A court of justice, moreover, formerly existed in England, which judged without jury, called the *star-chamber* (*camera stellata*)—a name respecting the derivation of which antiquarians are not agreed. It consisted of some lords, both temporal and spiritual, members of the privy council, and two judges of the supreme court of Westminster, and had properly jurisdiction only of some particular cases, rebellion, perjury, the official misconduct of sheriffs, &c., but extended its jurisdiction farther and farther, and became, especially under Henry VII and Henry VIII, an instrument of the most arbitrary power. After it had long been a subject of terror and hatred, it was entirely abolished under Charles I, in 1641. The trial by jury has since been regarded in England as one of the fundamental pillars of the constitution. By the Habeas Corpus act (see *Habeas Corpus Act*) of the reign of Charles II, greater security has been provided, that the trial by jury shall be withheld from no one; it is only to be lamented, that the petition for such an order is attended with extraordinary expense.—

II. *History of the Jury in France.* In the article *France*, some of the cruelties are mentioned, which are chargeable to the administration of penal justice in France before the revolution. Judicial despotism,

united with ignorance and corruption, was exhibited in horrid forms. The laws were severe. The ordinance of criminal procedure of 1670 was written in blood, giving up the accused to the arbitrary will of the judge, and denying him the aid of counsel, excepting in a few cases (*Tit. 14. § 8*); admitting a double application of the torture (the *question préalable*, to extort from the accused a confession of his own guilt, and the *question préalable* before execution, to compel him to reveal his accomplices); and allowing any judge, even the patrimonial courts, to institute a process without any statement of the ground of suspicion. The judges were even more severe than the laws. Their ignorance and carelessness occasioned mistakes and abuses, which their pride and the clannish spirit of the higher classes prevented from being rectified, and under the operation of which crowds of innocent persons lost liberty, property, reputation, and even life. Even the most atrocious criminals, Damiens, for instance, could not be legally sentenced to such cruel torments as this offender actually underwent, when torn to pieces by wild horses. All the districts, therefore, in 1789, were unanimous in desiring that the judgment in criminal cases should be made dependent on the verdict of a jury. In fact, such a provision was introduced into the constitution of September, 1791, and on this subject there was hardly any difference of opinion. The form of the English institution was followed,—a grand jury being appointed to find bills of accusation, and, after the conclusion of the process, which was to be public and oral, the question of fact was to be determined by a jury of twelve persons. There were to be, also, as at present, justices of the peace, clothed with proper judicial authority only in cases of minor importance and disputes respecting the right of possession; and likewise district courts, who should exercise a mutual appellate jurisdiction in regard to each other's decisions. The judges were to be chosen by the people, to remain six years in office, were to be reëligible at the end of this period, and to be paid, scantily indeed, by the state, being prohibited from receiving any fees. These provisions were made by the law of Aug. 24, 1790, respecting the organization of the courts. An ordinance respecting criminal jurisdiction of Sept. 29, 1791, a penal code of Oct. 6, 1791, and the regulations for the conduct of criminal prosecutions, Oct. 21, 1791, completed this new system, which has been subse-

quently retained in its fundamental principles, though not without undergoing essential alterations, by which a portion of the benefits, that are ascribed to the constitution of English criminal courts, was lost again, and the influence of the officers of the government on the administration of justice (it is said) improperly enlarged. The criminal courts were at first derived from the district courts, the judges sitting alternately in the criminal courts of the department. One of the judges was director of the jury, drew up the indictment, and assembled the jurors. The jury of accusation (*d'accusation*) consisted of eight members, three voices for the accused being sufficient to reject the complaint. This jury of accusation is now entirely abolished in the new criminal ordinance of Nov. 17, 1808. (See *Codes les Cinq.*) The criminal courts for more important causes (*cours d'assises*) are now deputations of the king's court (*cour royale* or *cour d'appel*), and the decision respecting complaints is committed to a division of the *cour royale*. The liberty of the accused to hold consultation with counsel is less restricted by the new laws than by late practice. According to a very doubtful interpretation of the article 302 of the act of 1808, to regulate criminal process, the counsel is allowed access to the accused only a few days before the beginning of the public prosecution. And, in some cases, as in libels, the definitive decision is taken from the jury, and given to the police courts. To require the unanimous agreement of the jurors to a verdict, which, even in England, is often attended with great difficulties, and leads to striking inconsistencies, was soon found entirely impossible in France. The simplicity of the English process, which, at the end of the proceedings, leaves to the jury the verdict of guilty or not guilty, it was found in France impracticable to imitate. In England, only the most important witnesses are brought forward, and a day, or, in very complicated cases, three or four days are sufficient to complete a trial, and consequently no uncommon powers of mind are required to retain the testimony in the memory. But, in France, even the most unimportant testimony is admitted. Hence several hundred witnesses are sometimes brought forward, and more weeks spent in a case than there would be days employed in England. It having been found absolutely impracticable to insist on unanimity in the jury, it has been resolved to assume the simple majority of seven against five, as decisive. But in that case the court

itself is obliged to deliberate on the same points, and an acquittal takes place, if the majority of the judges coincide with the minority of the jurors, so as to make the numbers of voices in favor of the acquittal equal to those for condemnation. The courts have also the right to set aside the verdict of the jury, if it appears to them to rest entirely on an error; but this must be their own free act, and cannot be proposed by any one. A simple majority of jurors decided the case of Fonk, and, at Paris, in 1823, that of doctor Castaing, indicted on a charge of poisoning. Among the objections made to the new French criminal process is the excessive power committed to the president. In England, the examination of witnesses is carried on by the prosecutor, and the counsel for the defendant, but in France, by the president alone. And there is frequently seen a very striking exercise of this privilege, as well as a hostility to the defendant, which ill comports with the judicial office. But the loudest complaints that at present are made, are of the selection of jurors (which belongs to the prefect alone), and the restriction of the right of challenging. The prefect draws up a list of sixty jurors, of which the president of the assizes strikes out twenty: the defendant (or defendants collectively, however many there may be of them) and the attorney-general, each, can strike out twelve, and the rest constitute the jury. In this way it is possible to collect a jury consisting of the enemies of the accused, and it is asserted that this is often done in the case of prosecutions for political offences. The best French jurists (Dupin, Berenger, Paillet, Bavoux, &c.) are therefore fully agreed, that the French jury contributes little towards a pure administration of justice. Even in England, its value is very doubtful. It may seem rash to attempt to assail the general conviction, not only of the English, but of the French also, and other nations that recognise, in this popular institution, the palladium of all genuine civil freedom, and place entire confidence in their trial by jury. But it is only the cases of political prosecutions, or those in which the innocent have been pursued by the revenge of the great, which give to the trial by jury its reputation; and there is still another question, not only whether the jury always merits this reputation, but whether the desired advantage cannot be attained equally well, and even better, by a proper organization of the judicial office. But to return to what we were saying on the value of the jury: This body in Eng-

land was not able to prevent the infamous judge Jeffreys (chief-justice under James II) from gratifying his private hatred, nor has the French jury been able to oppose any obstacles of importance to such an abuse of the judicial office. Algernon Sydney and lord Russell were condemned to death by the verdict of a jury. For common criminal cases, there can hardly be any more uncertain, fluctuating form of decision than the trial by jurors, who, without imparting to others the grounds of their verdict, or even settling any just grounds in their own minds, decide on the honor, freedom and life of their fellow citizens. In the first place, the actual existence of a crime need not be proved according to fixed rules. Suppose the case of a man being missed, or of a corpse being found—the jury are persuaded that a murder must have been committed, and pronounce some suspected person guilty, when it is possible that the missing man still lives, or that the dead man perished without personal violence. Some years since, David Evans was executed in London as the murderer of his wife, because an apothecary, who had never practised as a surgeon, maintained that the woman died in consequence of a wound on her head, while a surgeon in actual practice asserted, on the contrary, that the wound had nothing to do with her death, and that this was occasioned by an inflammation of the bowels. (*Morning Chronicle*, 1818, Feb. 24.) In the second place, the jury give their verdict on the slightest and most remote evidence, when the offence in question is an injury to property, a theft, robbery, fraud, or the like. The instances in which the innocence of persons condemned for such offences subsequently appears are therefore constantly increasing, and the explanation of this circumstance is to be found in the character of the jury, who are taken mostly from men of business in the middle classes, who feel more hostility to a thief or a swindler than to a murderer. The jury act, in fact, the part of legislators: when the penalty imposed by the law appears to them too severe,—as, for instance, the punishment of death for stealing property to the amount of 40 shillings,—they settle at their own pleasure the degree of the offence, so as to avoid the strictness of the law; and it has happened that a jury has declared a man who had stolen 10 guineas (210 shillings) guilty of theft to the amount of 39 shillings. The personal feelings of the jury towards the accused, and the light in which they regard the offence, often determine what

the verdict will be, before the trial is begun. It has been proposed, in Germany, to make juries give their reasons for their verdicts; but this only proves that the nature of this institution is not understood. An exhibition of their reasons comports as little with their nature as a further examination by a different tribunal. The verdict of the jury comes like a decree of destiny, without being capable of justification, examination or amendment; for the whole of the decision rests on things which cannot be a second time exhibited in exactly the same modifications—the deportment of the accused and the witnesses, the individual and momentary dispositions of the jurors. Even in England, doubts of the importance of the trial by jury are by degrees excited, and there is an approximation to the fundamental views of the German criminal process, which aims at exciting the moral feelings of the criminal by solitude and examination, and producing a confession, which makes the accused his own judge. No criminal is so hardened as never to experience a state of mind when the burden of conscience is too heavy for him, and he desires to reconcile himself to the law and his inward judge. To produce this effect is the aim of the criminal judges of Germany; and certainly it is at least as conformable to the high dignity of the administration of justice as the trial by jury. The abridgment of the length of the process, and the publicity of the administration of penal justice, are different things, and, though they are commonly united with the trial by jury, are advantages which may be imbodied with any other system.

The views suggested in the previous part of this article, written, as has been already observed, by a civilian unaccustomed to the practical operation of the trial by jury, deserve the consideration of minds accustomed to a different course of jurisprudence, not only from their theoretical acuteness, but from their development of supposed practical defects in the trial by jury. It seems fit, therefore, to give another exposition of this subject, which is maintained by persons educated under the common law, and to suggest some of the reasons why it is deemed the bulwark of public liberty, and the best safeguard of private rights under our forms of free government. The remaining part of this article is to be considered as independent of the foregoing; not so much as presenting a counter view, but as presenting the true grounds on which the institution was established, and is still dear to the free inhabitants of England and

America.—I. *The Origin of the Trial by Jury.* It has been traced back by antiquarians to a very early period in English history, and seems, indeed, in some form, if not coeval with the origin of the civil government in England, at least to have been used time out of mind in that kingdom. It is lost among the early Saxon colonies; and probably was derived from the mode of administering justice by the peers of the litigant parties in the feudal institutions of Italy, France and Germany. Mr. Justice Blackstone (3 *Comm.* 349, 350) considers that this tribunal was universally established among all the northern nations, and so interwoven with their very constitution, that the earliest accounts of the one give us also some traces of the other. Mr. Wynne (*Eunomus, Diag.* 3, s. 50) seems to entertain a different opinion, and, after stating that its origin is obscure (*caput inter nubila condit*), he asserts, that it is the noblest form of policy that was ever invented on earth, and comes nearest the impartiality of heaven. But, whatever may be the origin of the trial, it is of very high antiquity. And *Magna Charta* (ch. 29) referred to it as an existing institution, and provided that no person should be hurt, either in his person or property, unless by the judgment of his peers or the laws of the realm (*nisi per legale iudicium parium suorum vel per legem terre*).—II. *The different Kinds of Juries.* Juries are of two sorts, viz. grand juries and petty juries. The former may consist of any number more than twelve, and less than twenty-four persons. The office of the grand jury is to accuse persons who are supposed to be guilty of an offence. It may, therefore, properly be called the *jury of accusation*. The petty or petit jury consists of twelve persons only, and may properly be called the *jury of trials*, both in civil and criminal cases.—III. We shall first consider the organization, functions and proceedings of the grand jury. The mode of accusation is by a written statement in solemn form, describing the offence, with all the proper accompaniments of time and circumstances, and certainty of act and person, which is called an *indictment*, or by a mode less formal (which is usually the spontaneous act of the grand jury), called a *presentment*, and which is afterwards put into solemn form by some proper officer. No indictment or presentment can be made except by the concurrence of at least twelve of the jurors. The grand jury may accuse upon their own knowledge; but it is generally done upon the testimony of wit-

nesses under oath, and other evidence produced and heard before them. The proceedings of the grand jury are, in the first instance, at the instigation of the government or other prosecutor, and are *ex parte*, and in secret deliberation. The accused has no knowledge of, nor right to interfere with, their proceedings. If they find the accusation true (which is usually drawn up in form by the public prosecutor), they write upon the indictment the words "a true bill," which is signed by the foreman, or chief of the grand jury, and is presented to the court publicly, and in the presence of all the jurors. If the indictment is not proved to the satisfaction of the grand jury, the word "*ignoramus*" (we are ignorant), or "not a true bill," or "not found," is written on it by the grand jury, or by their foreman, and it is then, in common parlance, said to be *ignored*, and the accusation is dismissed, as unfounded. When the grand jury return an indictment as a true bill (*billam vera*), the indictment is said to be *found*, and the party stands indicted, and may be required to be put upon his trial. When the indictment is not found, or is declared to be not true, the accused, if he is in custody, or has been in any way required to appear at the court, and answer to any accusation against him, is entitled to be discharged, or dismissed from any further inquiry or attendance before the court. Every public offence may be properly the subject of an indictment, and taken cognizance of by the grand jury of the county within which it is committed. But there is another mode of proceeding at the common law, at the suit of the king, called an *information*, which is similar to an indictment, except that it is not found by the grand jury, and is filed, *ex officio*, by the proper officer of the government. An information cannot be filed except in cases of mere misdemeanors, or offences not capital; for, whenever any capital offence is charged against a party, he cannot be put upon his trial unless the accusation be made by the grand jury by indictment.—IV. *The Organization of the Grand Jury.* The functions being such as we have stated, it is obvious that the duties require great care in the selection of the persons who are to serve as grand jurors. A precept, commonly called a *venire facias*, issues to the sheriff of every county, some time before any court of criminal jurisdiction is held therein, requiring him to summon twenty-four good and lawful men of his county, to attend the court, to inquire into, and present all

offences committed within the body of the county. At the common law, these grand jurors are required to be freeholders of the county, and in England, where the sheriff makes the selection, they are usually gentlemen of the first respectability in the county. In the U. States, different modes prevail in different states in the selection of grand jurors. In some, the grand jurors are chosen, as in England, by the sheriffs; in others, as in the New England States, the grand jurors are drawn by the town officers, from boxes containing the names of all the persons qualified to serve, from time to time, and in such numbers as are required; and the names so drawn are returned to the sheriff, and by him to the court. But, in whatever way the grand jurors are selected, their names are returned on a piece of parchment or paper, by the sheriff, which is called a *panel*, and as many of them as appear in court are sworn on the grand jury, not exceeding twenty-three, so that twelve may constitute a majority. Their oath is, in substance, that they will diligently inquire and true presentment make of all offences committed within the county; that the government's counsel, that of their fellows, and their own, they will keep secret; that they will present no man for envy or malice; neither will they leave any one unpresented from fear, favor, affection, or hope of reward; but that they will present things truly as they come to their knowledge, according to their best understanding. Usually, the presiding judge of the court instructs them in the matters which are within their jurisdiction, by delivering to them a charge, containing a summary of the offences and other business which may come before them. They then retire to their room, and sit, as has been said, in secret, hearing evidence in favor of the prosecution only, as the main question before them is, whether the party accused ought to be put upon his trial to answer the accusation. But they are always bound to act upon legal evidence, and are instructed that they ought not to find an indictment unless upon their oaths they are persuaded, so far as the evidence goes, that the accusation is true. It has been already stated, that the grand jury is to inquire only into crimes committed in the county for which they sit. And this is regularly true at the common law, for no man was bound to answer for any crime but before his peers in the county and neighborhood where it was committed. But, by sundry statutes, both in England and America, some offences, not commit-

ted within a county, have, to prevent a defect of justice, been made cognizable therein. To enumerate these offences would occupy too large a space; and probably no two states in the Union have enacted precisely the same provisions. There are proper powers vested in the courts to compel the attendance of grand jurors; and if any are returned who are not qualified, they may be excluded from the panel; and if an indictment be found by persons not qualified, the accused may except to it on this account. Thus careful has the law been, in the original selection of grand jurors, who are supposed, and indeed required, to be men of integrity, impartiality and intelligence, and above all just objection. And thus a body of men, brought together for the occasion, and for that only, are placed between the government and the citizen, as a shield against oppression and injury, and to afford a reasonable protection to him, if he be not justly suspected of a crime.—V. *As to Petty or Petit Juries*, or, as they are sometimes called, *Traverse Juries*. These consist, as has been already said, of 12 persons, and no more, for the trial of all criminal offences, and of all issues of fact in civil cases at the common law. There are some peculiar modes of trial by jury in England, where a larger number than 12 is required, which may be called the *extraordinary trial by jury*; as, for instance, a grand assize for the trial of issues in writs of right, which consists of 4 knights and 12 other persons; and the jury of attain, to convict a former jury of a corrupt verdict, which consists of 24 jurors. But these modes of trial are, at present, wholly disused in America; and, in England, that of a jury of attain has fallen into neglect, since the general use of the remedy of moving for a new trial, where the verdict is unsatisfactory. And first, as to the trial by jury in civil cases. This is generally confined to issues of fact in proceedings at common law, as contradistinguished from proceedings in equity and admiralty. When, then, the parties have, in their written pleadings, or allegations, come to a fact which is denied on one side, and affirmed on the other, in a regular mode, the cause is said to be *at issue*, and the fact in controversy is to be ascertained by a jury. For this purpose, in England, a precept issues to the sheriff of the proper county, requiring him to select and summon to the court at which the trial is to be had, a suitable number of jurors, for the trial of the cause; and he accordingly makes return of the names

of the jurors, on a piece of parchment or paper (thence, as before stated, called a *panel*), who are compellable to attend at the time and place appointed. If the sheriff have any interest in the case, or is not impartial, or is related to the parties, the jurors are selected by some other proper officer, and usually by the coroner of the county. The qualifications of petty jurors do not differ, generally, from those required as to grand jurors, their duties being equally important, and requiring equal intelligence. When the cause is called for trial, if all the jurors do not appear, or any of them are justly objected to and set aside (of which we shall speak hereafter), the deficiency may be supplied from among the by-standers, having suitable qualifications, which is called taking jurors *de talibus circumstantibus*, from which circumstance the persons thus selected are denominated *talesmen*. The jury, being thus full, and above objection, are sworn (severally or together, according to the local usage in each state) well and truly to try the issue between the parties, and a true verdict to give "according to the evidence" (or "according to the law and the evidence given them," by the local usage of some states). In some cases, special juries are allowed to be selected, in a particular mode, for the purpose of trying particular causes; in other cases, the trials are by a jury chosen in the ordinary manner, and thence called a *common jury*. But these distinctions are unknown in some of the states of America, though they are very important in the practice in England. After the jury is sworn, the cause is then tried in open court, the evidence is offered, and the witnesses publicly sworn and examined in the presence of the judges, the counsel on each side, the jury, and all other persons in attendance. The question, whether any evidence is competent to be given to the jury, is, if any objection is made, first decided by the court. If rejected, it is never heard by the jury; if admitted, it is then read, or, if given by a witness, he is then examined before the jury. The party who calls a witness first examines him, and he is then liable to be cross-examined by the other side; and if any question is asked, which either party deems improper, the opinion of the court is taken on it before the witness is allowed to give his answer. So, also, it is, in respect to any written evidence or document offered at the trial. And if either party requests it, the judge who presides at the trial makes a note, in writing, of the objection, so that the party

may avail himself of it afterwards, upon a motion for a new trial, or by a writ of error, in a suitable manner. Before the evidence is offered, the counsel for the party who opens the cause, on each side, makes a short introduction, stating the case, the points in controversy, and the facts which he expects to prove, so that the jury may more clearly understand the bearing of the evidence, as it is produced. After all the evidence is gone through, the counsel on each side argue the case to the jury, at large, commenting upon every part of it, and each insisting upon a verdict in his favor. If any questions of law arise (as in most instances they do), the judge is requested, and is bound, publicly to state his opinion on all the points of law applicable to it. This he ordinarily does in summing up the case, after the arguments of the counsel are over; but he may do it before, if he chooses. When the arguments are finished, the presiding judge, in England, and in most of the states in America, proceeds to address the jury, stating to them the questions, recapitulating the evidence, and commenting on it in such a manner as he deems correct, for the purpose of enabling the jury to understand it well, and to apply the law properly to it. In these addresses, he often freely expresses his opinion as to the weight of evidence, the sufficiency of the proofs, the force of particular objections, and the comments of the counsel. But, it being a principle of law, that the jury is to respond as to matters of fact, and the judges as to matters of law (*ad quæstiones facti respondent iuratores, ad quæstiones legis respondent iudices*), it is always understood, that these comments on matters of fact are not binding on the jury, and that they are given solely with a view of enabling the jury to exercise their functions more perfectly, and that the jury are at liberty to disregard them if they please. But, generally speaking, they do receive great weight from the jury, who naturally place confidence in the judges, from their talents, experience and impartiality, and therefore, unless the judge obviously exhibits some improprieties, or betrays some unjustifiable feeling, they consider him as a friend, aiding and assisting them in their duty; and, his addresses being always in public, and open to the criticism of the public, as well as of the profession, it rarely occurs that his conduct is deemed exceptionable. Still the jury have a right to form, and do form, an independent judgment upon matters of fact; and their judgment is often conclusive. After the judge has

finished his summary, the jury withdraw into a private room, where they are kept together for the purpose of deliberation, until they have all agreed in a verdict (*verdictum*) upon the point in controversy. They are not permitted to have any intercourse with any other persons, and are allowed, during their continuance in secret session, to have only such food and other necessaries as are indispensable. Indeed, by the old law, they were to be kept without meat, drink, fire or candle, until they were agreed, unless by permission of the court, which soon, however, became almost a matter of course. When they are agreed, they come into open court, and, their names being called, they deliver in their verdict, which is recorded by the proper officer, who then reads it aloud to the jury, and asks them if they agree to it as recorded, to which they all publicly assent. If either party doubts it, the jurymen are severally asked if they agree, which is called *polling* the jury. Sometimes, when the facts are very complicated, or involve questions of law of great difficulty, the jury, instead of finding a general verdict, that the issue of fact is for the plaintiff or for the defendant, state all the facts at large, and ask the court to decide upon those facts, whether the issue ought to be found for the plaintiff or for the defendant. This is called a *special* verdict. It rarely occurs in criminal cases, and is not very common in civil cases. But the jury are never obliged to find a special verdict, and may, in all cases, give a general verdict, if they choose. If the jury, after being kept together a considerable time, cannot agree, they are usually brought into court by the proper officer, and the court, if their difficulty is about any matter of law, often makes additional explanations. But if, after every reasonable effort, the jury continue to disagree, they are discharged by the court, and the cause must then be tried anew. In criminal cases, and especially in capital cases, the court with great reluctance allow the discharge of a jury, after the cause is once committed to them.—Next, as to the trial by jury in *criminal cases*. Here the qualifications of jurors do not differ from those required in civil cases. But the law, with a view to prevent the undue influence of the government in the selection of jurors, and the undue prejudices arising from public opinion, has thrown additional guards round the party accused. He is not only entitled to be tried by good and lawful men, of the neighborhood where the crime is alleged to have been committed, but to be con-

fronted with the witnesses, and to have, in capital cases, some privileges, which are not allowed either in civil cases or in offences of a subordinate character. And, in the first place, the right of challenge, which, though it exists for many purposes in civil trials, is of far more consequence and extent in criminal trials. A challenge is, properly speaking, an objection or exception to a juror, or to the whole jury, as incompetent to sit in a trial. It is of two sorts: the first is a challenge to the array, or an exception to the whole panel or list of jurors, as they are arrayed or set in order by the sheriff in his return. And it may be taken on account of the partiality of the sheriff, when he selects the jury, or of some default, omission or illegality of himself or of some other officer or functionary concerned in arraying or returning the panel. These exceptions are, or may be, various in their nature and extent, in different states; and the particular exceptions, at the common law alone, would not, independently of those provided for or disallowed by statute, be very instructive. This challenge may be either for a principal cause or to the favor, the former of which is founded upon positive proof or presumption of impropriety; the latter is founded upon less strong presumption or suspicion, and therefore properly to be inquired into, or to be decided by the sound discretion of the triers. Secondly, the other sort of challenge (which also may be for a principal cause or to the favor) is a challenge to the polls, that is, an exception to particular jurors, answering in some degree to the *recusatio judicis* of the civil and canon law. Challenges to the polls, at common law, have been reduced to four sorts: 1. Challenge *propter honoris respectum*, or in respect to nobility; as, if a lord or peer of the realm in England be empaneled on a jury, he may be challenged by either party, or may challenge himself. This cause, of course, does not exist in the U. States, where we have no nobility. 2. Challenge *propter defectum*, or for want of proper qualifications; as if a person be an alien or a slave; or in cases where he is required to be a freeholder, if he is not such; or is not of a suitable age, as a minor; or is a female, for females are not allowed to be jurors; or is convict of an infamous crime, or is otherwise disqualified. 3. Challenge *propter affectum*, for suspicion of bias or partiality. This may be a principal challenge, or to the favor. It is a principal challenge, as has been already stated, when there is pregnant

proof or presumption of partiality or of malice, as that a juror is of kindred to either party (at the common law, in the ninth degree); that he has already pre-judged the cause, as an arbitrator; that he has an interest in the cause; that he has taken money for his verdict; that he has formerly, as a juror, tried the same cause; that he is the servant, master, attorney or counsel of one of the parties. A challenge to the polls for favor (which supposes a doubt of impartiality) is where the party has no principal cause of challenge, but has suspicion of favor, and offers circumstances in support of such suspicion. In such a case, the validity of the objection is, by the common law, left to the determination of *triers*, whose office it is to decide whether the juror who is objected to is favorable or unfavorable, or, rather, whether he stand indifferent between the parties. The *triers*, in case the first man called as a juror is challenged, are two indifferent persons, named by the court; and if they try one man, and find him indifferent, he is sworn, and then he and the two first *triers* try the next who is objected to; and when a second is found indifferent, those two who are sworn as jurors become the *triers* of all the others who are objected to, in lieu of the two *triers* first chosen. This course of proceeding is still common in England and in several of the U. States. But in other of the states, the usual course is for the court to decide upon the indifference of the persons objected to as jurors. 4. Challenge *propter delictum*, or on account of some crime, of which the person called as a juror has been guilty, and which imports a disability and discredit as a juror. This applies to cases of a capital nature, and other infamous crimes, such as treason, felony, perjury, conspiracy, and other species of the *crimen falsi*. A person called as a juror may be called to say the truth (whence he is said to be interrogated *voir dire, veritatem dicere*) in respect to such causes of challenge as are not to his discredit or dishonor; but he cannot be called upon to acknowledge himself guilty of any crime, or other thing which renders him infamous. These are all the causes, strictly speaking, of challenge by the parties. But many persons are entitled to be excused from serving on juries, and, on this account, may plead the excuse for themselves, though the parties may not take the exception. Among these are magistrates, aged persons, and persons holding particular offices, and others having special exemptions. The challenges

above mentioned equally apply to civil and criminal cases. But in favor of life, in capital trials, the accused is indulged the privilege of challenging a certain number of persons, called as jurors, without assigning any cause; and this privilege is thence called the right of *peremptory* challenge. This is a provision founded in great humanity and tenderness towards persons capitally accused. The reasons commonly assigned for it are, 1. that every person is liable to strong dislikes and prejudices, in respect to particular persons, merely from their appearance, manners and gestures, although they are strangers to him, and that even a caprice or feeling of this kind may, in the course of the trial, embarrass the party in his defence; 2. that upon a challenge for cause shown, the reason may prove insufficient, and, if the party had no right of peremptory challenge, he might be tried by a juror who, from the very circumstance of being objected to, might conceive a prejudice against the accused. On these accounts, he is at liberty to challenge the juror peremptorily, after he has, for an insufficient reason, challenged him for cause; and, as the object of all trials is to allow a fair and full defence, the accused ought, at least, to have his wishes consulted so far as to exclude those whom he distrusts in the first instance. But as it is obvious that the right of peremptory challenge, if not limited by some known boundary, might forever prevent a trial, the law has fixed a definite number, to which the party is confined. The common law fixed this number at 35, or one short of three full juries; and that still remains the rule in all trials for treason. But in other capital offences, the right is now generally restrained, by statute, to 20, both in England and America. If a person attempts to challenge beyond this number, his challenge is disregarded. If, by reason of peremptory or other challenges, a sufficient number of jurors are not found, *talesmen* are appointed, as in civil cases. If several persons are tried at the same time, upon one indictment, each one is entitled to his full number of challenges, and one may challenge a juror not objected to by the others, and he must be excluded altogether; for every juryman must be above any objection by any of the persons tried. We have thus far treated of challenges by the party accused. The government has, strictly, no right to challenge, except for cause shown; but for cause shown the government may either challenge the array, or the polls, in the same manner as

a private person. However, it is usual, at least in England, if a juror is objected to by the government, not to call upon the government to show cause until the panel is gone through, and then, if sufficient jurors are not found and sworn, the cause of the challenge may be inquired into; for, if there is a full jury without the persons objected to by the government, there is no strong reason to insist upon their being sworn, although no good cause has been shown. There are some other provisions favorable to prisoners accused of capital offences, and especially of political offences, which deserve notice. In England, in cases of treason, the prisoner is entitled to a copy of the indictment five days before his arraignment for trial, and a copy of the panel of jurors who are summoned, and their professions and places of abode, ten days before his trial, and a list of the names of the witnesses to be produced against him, the like length of time before the trial. He is also entitled, at the expense of the government, to have witnesses summoned in his behalf, to establish his defence, and to have counsel assigned to assist him in his defence. In America, in cases of treason, similar provisions in substance exist, with a difference only in respect to the length of time allowed for the copy of the indictment, and lists of jurors and witnesses. And in many of the states, an equally humane provision exists in respect to all other capital offences. By the laws of the U. States, the prisoner is entitled to have counsel assigned to him, and to have his witnesses summoned at the expense of the government, in all capital cases. In cases of treason, a copy of the indictment is required to be delivered three days before the arraignment, and also a copy of the list of jurors and witnesses summoned by the government, three days before his trial. In other capital cases, the time is two days, instead of three. The right to employ counsel in defence, is also secured to all persons accused of any crimes in the U. States. But in England, it is confined to cases of treason, and to mere misdemeanors. In capital cases, not of treason, counsel are not permitted to be employed in England, except in arguing questions of law. The quaint and unsatisfactory reason given for this exclusion is, that the judges are counsel for the prisoner,—a reason which, if good in any, is sufficient in all cases. But there is more of speciousness than of truth in the remark; for, though the judges ought to take care that the prisoner has a fair and impartial trial,

it is impossible that they can act as counsel for the prisoner exclusively; and the importance of counsel, exclusively for the prisoner, is admitted in all cases of treason. Why not equally so in other capital cases? Such is a very general outline of the trial by jury under the common law. It is deemed of immense value in England, and among the dearest rights of the people. In America, it is quite as dear, and is deemed of such high importance, that the right to a trial by jury, in all criminal cases, is secured by the constitution of every state in the Union, and is also provided for, in all civil cases at common law, where the amount in controversy is of any considerable value. The constitution of the U. States has provided, "that the trial of all crimes, except in cases of impeachment, shall be by jury; and such trial shall be had in the state where the said crimes shall have been committed. But when not committed within any state, the trial shall be at such place or places as the congress may by law have directed." And farther, "that no person shall be convicted of treason, unless on the testimony of two witnesses to the same overt act, or on confession in open court." And again, "that no person shall be held to answer for a capital or otherwise infamous crime, unless on a presentment or indictment of a grand jury, except in cases arising in the land or naval forces, or in the militia when in actual service in time of war or public danger. Nor shall any person be subject, for the same offence, to be twice put in jeopardy of life or limb; nor shall he be compelled, in any criminal case, to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law." And again, "that in all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the state and district wherein the crime shall have been committed, which district shall have been previously ascertained by law; and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor; and to have the assistance of counsel for his defence." And again, "that in suits at common law, where the value in controversy shall exceed twenty dollars, the right of a trial by jury shall be preserved; and no fact, once tried by a jury, shall be otherwise re-examined in any court of the U. States than according to the rules of the common law." Provisions of a similar nature, in

substance, will be found in most, if not in all, the state constitutions of the Union. They demonstrate the extreme jealousy of the people of the right of trial by jury, and their extreme solicitude to place it beyond the reach of the passions, and prejudices, and political objects, of those who, as rulers, may be called at any time to administer the government. This strong attachment to the trial by jury, both in England and America, after the experience of it for centuries, furnishes no small argument in favor of its efficacy as a security of right, and a redress of wrongs. It is perpetually spoken of as the palladium of our public rights and liberties; and in all the various fluctuations of public opinions, it has remained untouched and unsuspected. It is not surprising that those, who know it only in theory, or who at present see the administration of its powers and duties in a very imperfect state in the civil law countries, or who are accustomed to a jurisprudence foreign to its principles, should entertain doubts of its advantages, and should feel a deep sense of its defects. The first part of this article shows how difficult it has been found to transfer to France the trial by jury, and to administer it with the same beneficial effects as in England. The errors in France may have resulted, in part, from the imperfect knowledge of the courts, as well as of the juries, from the novelty of this mode of trial, and their want of experience in the management of it. Perhaps, too, there may be something in the other institutions of France, or in the temperament and character of the people, which may disturb its proper operation. It may be useful for us, before concluding this article, to review some of the grounds on which the trial by jury has been hitherto vindicated, and to glance at some of the defects which it is supposed to involve, as well as at some of the objections to which it is supposed to be liable—*Fas est et ab hoste doceri*. And, in the first place, it is not necessary to contend that, as an instrument of public or private justice, it is an institution absolutely perfect; that it is incapable of abuse; or that it never occasions error. That would be to require of it what belongs to no human institution whatsoever. Every work of man is, by his very nature, imperfect. Every form of government involves some inconveniences, and errors, and abuses. Every effort to administer justice must necessarily fall short of perfect correctness, from defects of evidence, from the infirmity of judges, from

the wrong biases of human opinion, from errors in reasoning, from ignorance, and passion, and prejudice, independently of all intentional wrong, or corrupt motives, or malice, or dishonesty, or deliberate baseness. The only question is, what, on the whole, is the best means of administering justice, taking human nature as it is, and human infirmity as it must ever operate. If crimes are to be tried and punished, if rights are to be enforced and wrongs redressed by judicial tribunals, what is the best structure of the institution for the purpose of trial and decision? There seems to be but a narrow circle of means, out of which the choice is to be made. Shall the tribunal be composed of executive officers of the government, or of judges appointed by the government for each case, or of judges holding their office at the pleasure of the government? Or shall the tribunal be composed of judges holding their offices permanently, and independently of the government? Or shall the tribunal be composed of jurors chosen at large, *pro hac vice*, or chosen permanently for that duty, without any previous qualifications of legal experience, learning or superior ability? And if so, by whom, and in what manner, shall they be chosen? Or shall the tribunal be of a mixed character, composed of judges learned in the law, permanent in rank and station, and of jurors selected for the occasion in an impartial manner, and the trial be had before the judges expounding the law, and the juries deciding the facts? In cases of crimes, the object is to protect the innocent and to punish the guilty. Where does the danger chiefly arise? In political accusations, the government not only is a party, but has a strong motive to produce conviction. In other cases, it may not have so strong a motive, but it may be subject to influences of an equally fatal character. If the king or other executive, or officers selected by him for that purpose *pro hac vice*, are to decide upon the guilt or innocence of the party, according to their own discretion and such proofs as are satisfactory to themselves, there is no security whatsoever against unjust convictions. The decision will be arbitrary, and according to the will of the prince or his favorites, or according to state policy, or perhaps public prejudice, actuated by strong resentment. If the trial be by judges solely appointed by the government, and holding their offices permanently, there may be dangers arising from other and different sources, from their political opinions, from

their state interests, from their irresponsibility to public opinion, and from influences of character and profession, which insensibly warp the judgment. If the trial be by permanent jurors, there will be still greater dangers from their want of the proper learning, and general weight of character, added to the other objections. So that any of the proposed substitutes does not furnish more safety or certainty, in the administration of criminal justice, than that of a trial by jury. On the other hand, the trial by jury, as known to the common law, affords some checks upon arbitrary power, and enlists many just feelings and reasonable guards against oppression. 1. The jurors are selected from the mass of intelligent citizens, of suitable qualifications, and of the same rank, and having the same general interests, as the accused. They are not permanently employed, and have no common connexion with each other, and no habits of fixed coöperation. They are, or may be, strangers to each other, and to the accused, until the moment when they are empaneled. They are subject to no reasonable exception, either in point of character or influence, for that would exclude them, at the will of the accused. They are subject to the same laws, and liable to the same prosecution, as the party on trial, and therefore have a natural tendency to sympathize with him. 2. The trial is had in open court, before judges who hold their offices permanently, and who are bound to administer the law, and to give their opinions publicly to the jury. From the moment that they are empaneled, they are excluded from all intercourse with every person except what takes place in open court; and their subsequent deliberations are private and secret. 3. They are under oath to decide the case upon the evidence given in open court. No testimony can be heard by them, except what is admitted and delivered in open court; so that the court, the counsel, and the by-standers, have a perfect knowledge of every part of it. Thus the whole public become the ultimate judges of the sincerity and justice of their verdict. 4. If they find a verdict against the party, and there has been any error of law or fact, or any misconduct in the jury, the court will grant a new trial; but if they acquit him, there can be no new trial, for the law will not allow a man to be twice put on trial for the same offence, and thus his life, liberty or limb be put in jeopardy. Here we see the humanity of the common law, which leans in favor of the accused, and disables the

government from practising oppression upon any citizen, by successive vindictive prosecutions. 5. Again, if the evidence is doubtful, the party is entitled to an acquittal, and the court will so direct the jury; for the common law will not tolerate that any man should be punished, unless there be satisfactory proofs of guilt to the minds of 12 of his peers or equals. 6. It has been said that the facts are often complicated, and the guilt is compounded partly of facts and partly of law. This is true; but here again the wisdom of the common law has provided that the judges shall state to the jury what the law is, as applicable to the various postures of the facts, as they may find them. They are also generally assisted by the arguments of the counsel on each side, in arranging and comparing the facts; and the judge, in his summing up of the evidence, brings the whole in review, and points out to them the bearings of every part, and strips off the false glosses, if any, which have been made by counsel. But he still leaves them to decide upon it according to their own conscientious belief of it. 7. It is said that the arguments of counsel may deceive them, and blind them to the truth. But the answer is, that they have an equal opportunity to hear the opposite side, and that, generally, the judges assist them, when there is any attempt to misstate the evidence, by referring to their own notes of it, as given in open court. And from long habits, and experience in human life, jurymen learn to disregard the mere efforts of eloquence, and, under a sense of their religious and social obligations, consult the real truth and justice of the case. Would there be more security if no counsel were allowed? No person will say so. 8. It is also said that the judges may have an undue influence with the jury. This is certainly possible, and has actually occurred in corrupt times. In the case of chief-justice Jeffreys, referred to in the preceding part of the article, it should be remembered that he held his office during the pleasure of the crown, and not, as the judges of England now hold, during good behavior, or life. He was a devoted partisan of the crown, and has become infamous by his corrupt administration of the law. But it should be considered, that the jury could scarcely have been free from improper biases of some sort, otherwise they could not have found a verdict against the accused. In our day, and, indeed, at any time since the arbitrary times of king James II and the revolution of 1688, such conduct in a judge would be

sure to meet with universal reprobation, and would generally produce an acquittal of the prisoner, and a public impeachment of the judge. Nay, it is well known, that such is the jealousy of juries in this particular, that any undue interference or solicitude for conviction, exhibited on the part of a judge, would destroy his influence, and produce an opposite verdict. It is his supposed impartiality that gives weight to his opinion; and the jury know that they have a right to disregard it, if they please. 9. It is said, that juries may be influenced by improper motives, and sometimes disregard the law, and give a false verdict. This is possible, and, indeed, has probably sometimes happened. But the occasions are rare; and where there is a suspicion of that sort, it always injures the character of the jurymen, and subjects them to public scorn and odium. Generally, juries are scrupulous in respecting the law, because it is the only protection of their own rights. Where the law is very harsh, and the punishment is disproportioned to the offence, they have sometimes exhibited a repugnancy to convict; but they rarely have acquitted the party, unless there were circumstances of great doubt, or of great mitigation; and if their conduct, in such cases, is not strictly justifiable, it is generally not such as produces any reproach, either from the court or the public. These occasions, however, are rare, and constitute exceptions of no great moment in the general administration of justice. 10. It is not true, as is sometimes supposed, that juries are ready to convict on slight proofs, or insufficient evidence. Our law declares, on the contrary, that in such cases they ought to acquit the party; and it is always laid down to the jury by the court. Indeed, the judges, in this respect, always act as counsel for the prisoners, and give their advice to the jury, in respect to every reasonable doubt in the evidence. There are so many checks upon juries, in cases of this sort, that it can scarcely happen, that an unjust conviction, at least by the improper bias of the jury, can take place. If there be any error, it is usually on the side of mercy. 11. It is objected, that the jury sometimes find the party guilty of a part, and not of the whole offence, as of manslaughter when he is accused of murder. Certainly the jury do so; and for the best reason, that the law requires it. A jury ought not to find a man guilty of the whole of a charge, unless it is wholly proved. If what is proved amounts to a crime of the

same nature, but of inferior enormity, or more mitigated than what is charged, they find their verdict according to the proofs, and the court inflict only the moderated punishment. And any other course would be flagrant injustice. But a jury cannot, upon a trial for one offence, find a man guilty of another offence, not of the nature of the one charged; for instance, upon a charge of murder, they cannot find him guilty of forgery; but if he is charged with stealing two watches, they may find him guilty of stealing one only. 12. It is also objected, that juries often favor criminals. But this is not generally true, except to the extent that the law favors them. There may be cases of a popular cast, or of an odious nature, where juries have occasionally shown improper biases for the accused; but this objection applies to all tribunals, and is founded on human infirmity generally. Juries do not, even in cases of this sort, often depart from their duty; and the exceptions are so few, that they are seldom felt or urged in free governments. 13. But an objection the most pressed by those who are not practically acquainted with the trial by jury, is, that unanimity is required in pronouncing a verdict of acquittal or condemnation. It is true, that no verdict can be received, which has not the assent of all the 12 jurors; and there are no means of compelling an assent; and yet, practically speaking, few cases of disagreement occur, except where there is a solid foundation for real doubts and difficulties. Unanimity is more common than, at first view, might be suspected. In the first place, the jury reason with each other upon all doubtful points, and if they at first differ, the differences are often removed by further discussion. Pride of opinion is not enlisted on either side, and sometimes each recedes from the first limits of his own opinion. In the next place, the differences of opinion are more often upon inferences and conclusions from known facts than upon the facts themselves; and more often upon doubts as to the proper application of the law to those facts; and still more often upon mere collateral questions, where there is no common standard of measure, as in assessing damages. In criminal cases, fewer difficulties ordinarily arise than in civil cases, because doubts weigh favorably for the accused, and often produce an acquittal. But, after all, there is not probably one in twenty cases, tried by a jury, in which there is a final disagreement; and it is by no means sure, that a decision could be had more just or fair

by requiring a majority, or any other number, than by requiring unanimity. The jurors might then be equally divided, or the struggles of the minority to prevent a verdict might be equally violent. Most trials give rise to differences on several points; and, in such cases, the unanimity of a majority, in a general verdict, must be produced in the same manner as unanimity in the whole jury. But the best answer to the objection is, that experience is in favor of requiring unanimity of the whole jury. No practical evil has, as yet, been felt from the rule. And it is no small recommendation of it, that it gives a satisfaction and confidence to the public mind, in England and the U. States, that the decision of a mere majority could scarcely ever give. If unanimity is less easily obtained in France, that proves nothing as to the value of the principle elsewhere. The failure may be from the novelty of the trial in France, or from the habits and character of the people, or from the imperfect comprehension of the proper duties of the judges and the jury.—Most of the remarks above made refer especially to juries of trial in criminal cases; but they are, in a great degree, applicable to civil cases also. It remains only to add, that the other preliminary guards, interposed by the common law in criminal cases, are of inestimable value to every citizen. He cannot be accused, nor be brought to trial, unless upon an indictment found by a grand jury. He is thus saved from prosecutions founded in malice, hatred, political opposition, personal feeling and popular prejudice. The government cannot touch him; the people cannot make him the victim of their jealousy or suspicion. A grand jury of incorruptible and impartial men, who are his equals, must first accuse him, upon the hearing of legal proofs and sworn witnesses, before he can be called to answer for any offence. 12 men, good and true (*probi et legales homines*), must concur in the indictment; and 12 more must concur, upon his trial, in asserting his guilt, before he can be punished. When his guilt is ascertained, the punishment rests, not in the discretion of the king, or of the government, or any mere executive officer; it is to be declared by the judges, before whom he has been tried, or in the same court, according to laws previously passed, and regulating the nature and extent of the punishment. It is not too much, then, to affirm that the trial by jury is justly the boast of England and America; and we may hope that, by the goodness of Providence it may be perpetual.

JURY, GRAND. (See the preceding article.)

JURY-MAST; a temporary or occasional mast erected in a ship in the place of one that has been carried away by tempest, battle, &c. Jury-masts are sometimes erected in a new ship, to navigate her down a river, or to a neighboring port, where her proper masts are prepared for her.

JUS (*Latin*) signifies, 1. that which is right or conformable to law; also the obligation which the law imposes; 2. a body of laws, decrees and usages; 3. a man's privileges, singly or collectively; 4. the place where justice is administered; 5. the power which originates from the law. Hence the word is of very frequent use in law.—*Jus divinum* is that which is ordered by a revelation, in contradistinction to that which is ordered by reason; but as the *right* must be one and the same, it is evident that the distinction exists only in the form, and not in the essence, because that which is ordered by our reason is to be referred to God, as its origin, equally with that which is decreed by revelation. A law may have both a human and a divine origin; for instance, "Thou shalt not kill." This rule may be adopted because it is ordered in the decalogue, or because it is the dictate of reason, and is established by most nations, unacquainted with the decalogue. The division, however, is rather antiquated, and the philosophical lawyer will refer all law to a common origin. (See Thomasius, *De Jure Div.*)—*Jus Italicum* signified the lowest degree of privileges enjoyed by cities under the Romans.—*Jus Latii*, or *jus Latinum*, denoted the privileges granted by the Romans to the inhabitants of Latium, according to the various significations of the word. (See *Latium*.) It held a rank between the *jus Italicum* and the *jus Romanum*.—*Jus Quiritium* (*civitas optima lege, optimo jure*); the fullest enjoyment of Roman citizenship, the privilege and obligations of Roman freeborn citizens, including, in the flourishing times of the commonwealth, 1. public privileges—*libertas* (security of personal liberty), *militia* (participation in the service of the legions), *census* (registration on the list of property: see *Census*), *jus tribus* (the incorporation in a tribe), *jus suffragiorum* (the *jus Quiritium* in a narrower sense, the right of suffrage), *jus honorum* (participation in public honors), *jus sacrorum* (participation in religious celebrations, *sacra publica* and *privata*); 2. private privileges—*jus gentilitatis et agnationis* (the privilege of fami-

ly and clan; e. g. *successio* and *tutela agnatorum*), *ius legitimi domini* (the privilege of lawful property), *ius connubiorum* (privilege of lawful marriage), *ius patrium* (unlimited power over the persons and property of real or adopted children). Heineccius and others mention only two *jura Quiri.*, and, besides them, *ius civitatis* or *civitas Romana*. Conradi (*De Jure Quir. a Civitate Romana non diverso*, Helmstædt, 1742, 4to.) is of a different opinion. Still different is the opinion of Cramer (*De Juris Quiri. et Civitatis Discrimine*, Kiel, 1803, 4to.). At all events, the *ius civitatis* was of a more limited character than the *ius Quiritium*. Thus newly admitted citizens received it.

JUSSIEU, Antony and Bernard, de; two brothers, born at Lyons, in the latter part of the seventeenth century, eminent as physicians and botanists.—*Antony* made a botanical tour, and brought from Spain a large collection of plants. After this, he wrote upon subjects connected with natural history and medicine, and died in 1758, in the 72d year of his age, much lamented, on account of his philanthropy.—*Bernard*, born in 1699, was appointed professor of botany in the royal botanical garden. We are indebted to him for a new edition, in two volumes, 12mo., of Tournefort's History of Plants in the Neighborhood of Paris (*Histoire des Plantes qui naissent aux Environs de Paris*), published in 1725. Jussieu's scholars used to bring him flowers which they had mutilated or compounded with others, for the purpose of testing his knowledge, and he always recognised them immediately. Some of them having made the same experiment on Linnæus, he said, "God or your teacher (Jussieu) can alone answer your questions." Jussieu, after having been a long time employed upon a systematic division of the vegetable kingdom, died in 1777, aged 79. Cuvier, in a biographical memoir on Richard, calls Bernard de Jussieu "the most modest, and, perhaps, the most profound botanist of the eighteenth century, who, although he scarcely published any thing, is, nevertheless, the inspiring genius of modern botanists."—*Antony Lawrence Jussieu*, nephew of Bernard, born at Lyons, in 1748, physician, member of the academy of sciences at Paris, and of the royal medical school, made a report, in 1804, on the results of captain Baudin's voyage to New Holland. In the anatomy of plants, he has distinguished himself by having made known the discovery of a

substance enclosed in the kernel, called by him *perisperma*.

JUSTICE OF THE PEACE. The word *justice* is applied to judicial magistrates; as *justices* of such a court, and, in the English laws, *justices of the forest*, *hundred*, *of the laborers*, &c.; and hence the appellation *justice of the peace*—that is, a judicial magistrate intrusted with the conservation of the peace. A great part of the civil officers are, in fact, the conservators of the peace, as their duty is to prevent or punish breaches of the peace. Thus the judges, grand-jurymen, justices of the peace, mayors and aldermen of municipal corporations, sheriffs, coroners, constables, watchmen, and all officers of the police, are instituted for the purpose of preventing, in different ways, crimes and disturbances of the peace of the community, or for arresting, trying and punishing the violators of the laws and good order of society. In England and the U. States, the justice of the peace, though not high in rank, is an officer of great importance, as the first judicial proceedings are had before him in regard to arresting persons accused of grave offences; and his jurisdiction extends to trial and adjudication for small offences. In case of the commission of a crime or a breach of the peace, a complaint is made to one of these magistrates. If he is satisfied with the evidence of a commission of some offence, the cognizance of which belongs to him, either for the purpose of arresting, or for trying the party accused, he issues a warrant directed to a constable, or other executive officer designated by the law for this purpose, ordering the person complained of to be brought before him, and he thereupon tries the party, if the offence be within his jurisdiction, and acquits him or awards punishment. If the offence charged be of a graver character, the adjudication upon which is not within the justice's jurisdiction, the question then is, whether the party complained of is to be imprisoned, or required to give bonds to await his trial before the tribunal having jurisdiction, or is to be discharged; and on these questions the justice decides according to his view of the law and the facts. In England, there are some officers, as the master of the rolls, some municipal authorities, &c., who are justices of the peace by prescription, in virtue of their other office; but, in general, the appointment is by commission; and, in England, when a new commission issues to justices in a certain county, this supersedes former commissions for the same county, of

course. In the U. States, the office is held only by special appointment, and the tenure is different in different states, the office having been held, in one state at least, during good behavior; but the commission is more usually for seven years, or some other specific limited period. These magistrates have usually also a civil jurisdiction of suits for debts, on promises, or for trespasses (where the title to real estate does not come in question, and with some other exceptions), to an amount varying, in the different states, from \$13.33 to \$100. In some states, a party may appeal from the decision of the justice to a higher tribunal, whatever may be the amount in question, in a civil suit, and whatever may be the judgment. In other states, no appeal is allowed, except in case of an amount in question exceeding four dollars, or some other certain, but always inconsiderable sum. So an appeal is usually allowed to the accused party in a criminal prosecution before a justice of the peace, in case of the judgment being for a penalty over a certain specified and small amount, or an imprisonment over a certain number of days. It is evidently of the greatest importance to the peace and good order of a community, that the justices should be discreet, honest and intelligent. (For the French justices, see *Peace, Justices of the.*)

JUSTIN, surnamed the *Martyr*; one of the earliest and most learned writers of the Christian church. He was the son of Priscus, a Greek, and was born at Flavia Neapolis, anciently called *Sichem*, a city of Samaria, in Palestine, towards the close of the first century. He was educated in the pagan religion, and, after studying in Egypt, became a Platonist, until, in the year 132, he was led, by the instructions of a zealous and able Christian, to embrace the religion of the gospel. He subsequently went to Rome, in the beginning of the reign of Antoninus Pius, and drew up his first Apology for the Christians, then under a severe persecution, in which he shows the cruelty and injustice of the proceedings against them. He was also equally zealous in opposing alleged heretics, and particularly Marcion, against whom he wrote and published a book. He not long after visited the East, and, at Ephesus, had a conference with Trypho, a learned Jew, to prove that Jesus was the Messiah, an account of which conference he gives in his Dialogue with Trypho. On his return to Rome, he had frequent disputes with Crescens, a Cynic philosopher, in

consequence of whose calumnies, he published his second Apology, which seems to have been presented to the emperor Marcus Aurelius, in 162. Crescens preferred against him a formal charge of impiety for neglecting the pagan rites, and he was condemned to be scourged, and then beheaded, which sentence was put into execution, in 164, in the 74th or 75th year of his age. Justin Martyr is spoken of in high terms of praise by the ancient Christian writers, and was certainly a zealous and able advocate of Christianity, but mixed up too much of his early Platonism with its doctrines. The best editions of his works are those of Maran (Paris, 1742, folio), and of Oberthur (Würzburg, 1777, 3 vols., 8vo.).

JUSTIN; a Latin historian, who probably lived at Rome, in the second or third century. He made an epitome of the history of Trogus Pompeius, a native of Gaul, who lived in the time of Augustus, and whose works, in 44 books, contain a history of the world, from the earliest ages to his own time. His history of Macedonia was particularly complete. To judge from the epitome (for the original is lost), there were many errors in the work, especially in the Jewish history; but this epitome, which corresponds to the original in its title and arrangement, having compressed into a brief space so much of the important matter of the old histories, has obtained a considerable reputation, and even now is often used in schools. The style is, on the whole, elegant and agreeable, but it is destitute of that noble simplicity and classical correctness which distinguish the work of a master. The best editions are those of Grævius (*variorum*), Hearne (Oxford, 1705), Fischer (Leipsic, 1757), and Wetzel (Leignitz, 1806). (See Heeren, *De Trogi P. Fontibus*, in *Comm. Soc. Gott.* xv.)

JUSTINIAN I, surnamed the *Great*, nephew of Justin I, emperor of the East, celebrated as a lawgiver, was born in 483, of an obscure family. He shared the fortunes of his uncle, who, from a common Thracian peasant, was raised to the imperial throne. While consul (521), he exhibited splendid games to the people. He likewise flattered the senate, and sought their favor; in consequence of which that body conferred on him the title of *nobilissimus*. His uncle, infirm from age, and suffering from a wound, admitted him to a share of his power. Yet it was not till after his death, about August 1, 527, that Justinian was pro-

claimed emperor. He now married Theodora, whom he raised from the condition of an actress and a public prostitute to the throne of the Cæsars. She acquired an absolute mastery over her husband. Under his reign, the parties of the circus contended with great animosity, and, under the names of the *Greens* and the *Blues*, occasioned many bloody scenes in Constantinople. The violent means which Justinian used to quell the tumult only served to increase it, and a conflagration, which broke out in consequence, laid the greatest part of Constantinople, and his own most beautiful buildings, in ashes. Justinian's own life was in peril. After the turbulence of these parties was extinguished by streams of blood, and a multitude of executions, Justinian finished the war with the Isaurians, and his general, Belisarius, in 523 and 529, obtained three glorious victories over the Persians. This great general destroyed, in 534, the empire of the Vandals in Africa, and carried Gelimer, their king, a prisoner to Constantinople. Spain and Sicily were reconquered, and the Ostrogoths, who possessed Italy, were vanquished. In 536, Belisarius made his entry into Rome, and the eunuch Narses, another of Justinian's generals, in 553, put an end to the dominion of the Ostrogoths in Italy. These successes restored to the Roman empire a part of its former vast possessions. Justinian now turned his attention to the laws. He commissioned 10 learned civilians to form a new code from his own laws and those of his predecessors. To this code Justinian added the Pandects, the Institutes and Novels. These compilations have since been called, collectively, the *body of civil law* (*corpus juris civilis*). (See *Corpus Juris*, and *Tribonianus*.) Justinian was also intent upon building new cities, and upon fortifying others, and adorning them with new edifices; but he was particularly desirous of establishing peace in religious matters. Amongst other churches, he rebuilt that of St. Sophia at Constantinople, which had been burnt in the quarrel of the Greens and Blues. It is esteemed a masterpiece of architecture. The altar in it was made entirely of gold and silver, and adorned with a vast number and variety of precious stones. This church, a part of which is now standing, and is used by the Turks as a mosque, was so magnificent, that Justinian, when, on the day of its dedication, he beheld it for the first time, in its full splendor, cried out for joy, "To God alone be the glory!

I have outdone thee, Solomon!" But it was his unhappy fortune, as it was that of the Jewish king, to outlive himself. Towards the end of his life, he became avaricious, without losing his love of splendor, suspicious and cruel. He oppressed the people with taxes, and lent a willing ear to every accusation. (For his treatment of Belisarius, see *Belisarius*.) He suffered his own servants to commit the most flagrant crimes unpunished. He died in 565, in the 83d year of his age, after a reign of 38 years. His love of the monks, of saints, and of theological questions, did not protect him from the censure of the divines, who esteemed him a heretic. Much that was great and glorious was accomplished during his reign, but he had little share in it.

JUSTITIA (*justice*); called, by the Greeks, *Astræa*, *Themis*, *Dike*. With the Romans, this goddess was an abstract rather than a personal deity. She is frequently represented upon coins as a maiden, with a fillet or a diadem; sometimes with a sword and scales; sometimes with a cup in one hand and a sceptre in the other.

JUTLAND; a province in Denmark, bounded on all sides by the sea, except towards the south, where it is bounded by Sleswick. It is about 180 miles in length, and from 70 to 90 in breadth, and, of all the territories belonging to Denmark Proper, is the largest, and yields the greatest revenue. Square miles, 9500; population, 440,000. It is divided into four bishoprics—Aalborg, Wiborg, Aarhus and Ripen. The country is indented by bays and inlets, but has few rivers, and none large. The north coast is an immense range of sand-banks, dangerous to navigation. The country is generally low, having no mountains. On the east coast there are extensive forests of oak, fir, birch, &c.; on the west are hardly any species of trees but alder and willow. The kind of grain most cultivated is rye, great quantities of which are exported to Norway. The pastures are extensive and rich; horses and cattle numerous. Iron, marble and limestone are found; also excellent turf. Most of the inhabitants speak Danish; the gentry also German. The religion is Lutheran. Agriculture and education are in rather a backward state. (See *Denmark*.)

The *Peninsula of Jutland*, anciently called *Cimbrica*, or *Chersonesus Cimbrica*, includes both the province of Jutland and the duchy of Sleswick in the south.

JUVENAL. Decimus Junius Juvenalis, a

native of Aquinum in the Volscian territory, flourished at Rome in the latter half of the first century. He studied rhetoric for his amusement, but afterwards devoted himself to poetry, especially satire. Having severely lashed the favorite pantomime Paris in his seventh satire, he was appointed by Domitian, under pretence of honor, prefect of a cohort (*præfectus cohortis*) in the most distant part of Egypt. Under Trajan, he returned to Rome, in the 82d year of his age. He was one of the most powerful and caustic of the Roman satirists. He wrote 16 satires (the genuineness of the last, however, is doubtful), in which he chastises the follies and vices of his times. His style is not so elegant, nor his disposition so mild and humorous, as that of Horace, nor yet so gloomy and stern as that of Persius, and he often betrays the rhetorician. The best editions are those of Henninius (Utrecht, 1685, 4to.; Leyden, 1695, 4to.), and the latest by Ruperti (Leipsic, 1801, 2 volumes), and abridged (Göttingen, 1804, 2 volumes). Gifford's translation, with a preface and notes, is very valuable. Johnson's imitations of the third and tenth satires are deservedly celebrated.

JUVENCUS, Caius Vettius Aquilinus; presbyter in Spain; a Latin poet who flourished about 325 A. D., in Spain. He translated the history of Christ, chiefly after Matthew, in hexameters (*Historia evangelicæ Lib. iv.*). A. R. Gebser published a critical edition of Juvenecus in Jena (1827, 2 volumes), which makes, at the same time, the beginning of a *Bibliotheca Latina Poetarum veterum Christianorum*. In this edition an enumeration of all other editions is to be found. Juvenecus also turned the book of Genesis into hexameters (in Martini's *Nova Collect. vet. Monument.* vol. iv, page 15 seq.).

JUVENTA (*Juventas* with the Romans); the goddess of youth, but not to be confounded with Hebe; for she had not an individual, but only an abstract existence. She had a chapel near the capitol, and a festival established in honor of her was celebrated by the youth. She is repre-

sented upon coins holding a censer in her left hand, and with her right strewing incense upon a tripod, because the youth, when they came to consecrate the first growth of their beards, brought an offering of incense.

JUXON, William, bishop of London, and subsequently archbishop of Canterbury, a prelate of distinguished mildness, learning and piety, was born in the city of Chichester in 1582, and educated at Oxford. The law appears to have been his original destination. The friendship he contracted with his fellow collegian Laud, might have induced him to take orders. In 1621, he was made president of St. John's college, Oxford, and, by the continued patronage of his friend, dean of Worcester (1627), clerk to the royal closet (1632), bishop of Hereford (1633), and that of London before the expiration of the same year. In 1635, he was appointed lord high treasurer of England. The nomination of a churchman to this dignified and responsible situation excited a strong sensation among the puritanical party, who made it the ground of severe invective against the government and primate; but, on his resignation of the office, after having held it something less than six years, the integrity and ability with which he had discharged its various duties, were admitted on all hands. During the whole progress of the unhappy contest which followed, he maintained an unshaken fidelity to the king, whom he attended during his imprisonment in the Isle of Wight, and on the scaffold, on which occasion he received from the hand of Charles, the moment previous to his execution, his diamond George, with directions to forward it to his son. After the king's death, the parliament threw him into confinement for contumacy in refusing to disclose the particulars of his conversation with the king; but he was soon released, and continued to live in privacy until the restoration. He was then called again into public life, and was raised to the primacy. He survived his elevation little more than two years, dying June 4, 1663.

K.

K ;* the eleventh letter of the English alphabet, representing a close articulation, produced by pressing the root of the tongue against the upper part of the mouth, with a depression of the lower jaw, and opening of the teeth, and differs, in most ancient and modern languages, from *g* hard only by a stronger pressure of the tongue, and a stronger expiration. (See *G*.) **K**, by the Greeks called *kappa*, is probably of later origin than *G*, as its most ancient form on monuments seems to be a contraction of gamma, i. e. in its first straight and its second bent form (*I C*). On the ancient coins of Crotona, Corinth, Syracuse, we find this sign, ϙ, from which the Roman *Q* originated. Both signs, according to Payne Knight, originated from the union of the double-bent gamma. In Latin, the *k* was superfluous, its place being supplied by *c*. The Greek *κ* was not adopted by the Latins before the time of Sallust, and was only used in words which began with *ca*, as *kaput*, *kalumniā*, *kalumniator*: hence a *K* was branded on the forehead of calumniators. As an abbreviation, in Latin, it signifies *Kæso* (a name), and several other words, *kalendæ*, &c. The Greek *κ* stands, on coins, for *Καίσαρ*, Cæsar, *Κλαυδίου*, Claudius, *Καμπανία*, Campania, &c. It often also signifies *Carthage*. As an abbreviation, it often stands for *καί*, and *κοινων*, common, *κολωνία*, colony, *κορη*, virgin, &c. The Greek *κ* signifies 20, and, with a perpendicular stroke under it, *κ̄*, = 20,000. *K*, in Latin, is equal to 250; with a horizontal dash over it, *K̄*, = 250,000. In Hebrew, it answers to *kaph* or *koph*. The Italians, Spaniards and Portuguese have banished the letter entirely from their alphabet. The French use it only in words originally German, Breton, &c.; but, of late, it has become frequent in proper names of Oriental origin, on account of the numerous translations from Oriental languages into the French. In English, most modern writers drop it at the end of

words of Latin origin, as *public*, *music*, &c., formerly *publick*, &c; but, in monosyllables, it is retained on account of their derivatives. In Swedish, Danish, Dutch, Polish, *k* sounds as in English. *K* signifies, on French money, *Bordeaux*, and, on money coined at Crennitz, *K* and *B* signify the mines of *Kermecz* and *Bánya*. *K*, before a vowel, is one of the easiest sounds children learn; but it is difficult, if it precedes another consonant. The *k*, at the beginning of a word, does not always belong to the root, but is, like other aspirated letters, often a mere prefix. In German, it often originates from the reduplication *ge* and *g* (see *G*), particularly before a consonant.

KAABA; originally a temple at Mecca, in great esteem among the heathen Arabians, who, before they embraced Mohammedanism, called a small building of stone, in the same temple, *kaaba*, which has, in turn, become an object of the highest reverence with the Mohammedans. They say it was built by Abraham and Ishmael. On the side of it is a black stone, surrounded with silver, called *brak-tan*, set in the wall, about four feet from the ground. This stone has served, since the second year of the Hegira, as the *kebla*, that is, as the point towards which the Mohammedan turns his face during prayer. The pilgrims, or *hadgis*, touch and kiss this stone seven times, after which they enter the kaaba, and offer up their prayer. The Mohammedans first turned their face towards Jerusalem, until Mohammed ordered the present direction. Burckhardt (q. v.), in his *Travels in Arabia*, says "The holy kaaba is the scene of such indecencies, as cannot, with propriety, be more particularly noticed. They are not only practised with impunity, but it may be said publicly; and my indignation has often been excited at what drew forth only a laugh from other passengers." We find, therefore, that the Mohammedan pilgrimages produce the same disorders as those which attend Catholic pilgrimages that attract great numbers of people, and which

* Where the reader may fail to find articles under *K*, he is referred to *C*.

have led to the prohibition of such pilgrimages in most Catholic countries. In some places, however, they still exist, with all their disorder and licentiousness, as, for instance, at Einsiedeln, in Switzerland. The same results take place in the numerous assemblages of other sects, of which instances might be cited from Europe; and camp-meetings have not unfrequently been charged with a like tendency. The evil is the natural consequence of assembling a multitude in a state of excitement.

KABBALA. (See *Cabala*.)

KABUL. (See *Afghanistan*.)

KÆMPFER, Engelbrecht, a famous traveller, born at Lemgo, in 1657, and excellently educated by his father, a clergyman, studied medicine at Königsberg, performed a journey, in 1683, as secretary to a Swedish embassy, by land through Russia to Persia; after which he visited Arabia, Hindoostan, Java, Sumatra, Siam and Japan, in which last country he resided two years. In 1692, he returned, was appointed private physician of the count of Lippe, in his native city, and died in 1716. Of his writings, his *History and Description of Japan* is deserving of mention. This work was translated into English, from the manuscript, in 1727, published at London in two folio volumes; and, in the German language, it appeared first at Lemgo, in 1774, edited by Dohm. The greater part of his manuscripts, rich in important observations, have not yet been printed. Sir Hans Sloane purchased them from Kæmpfer's heirs, and they are now to be found in the British museum.

KÆSTNER, Abraham Gotthelf, a celebrated mathematician and epigrammatist, born at Leipsic, in 1719, never attended a public school. From his tenth year, he received instructions in jurisprudence from his father, who was professor in Leipsic; and in his eleventh, he joined a debating society of several youth studying law. He applied himself to philosophy, physics and mathematics; metaphysics in particular, according to his own statements, had peculiar attractions for him. It is remarkable, that he found addition and multiplication very difficult, even after he had made considerable progress in mathematics. He continued also the study of law. In 1739, he held disputations, and began to deliver lectures on mathematics, philosophy, logic and jurisprudence. He also attended to belles-lettres. Having obtained a professorship extraordinary in 1746, he was, in 1756, established on advantageous terms, in Göttingen, as professor of

natural philosophy and geometry. The study of mathematics was greatly promoted by his means. Among his numerous writings, which fill nine pages in Meusel's *Gelehrte Deutschland*, his *Geschichte der Mathematik* (1795) is the best. In general, his acute mind seems to have been too much directed to single points to allow him to grasp, and exhibit happily, the whole of the mathematical and physical sciences. He was not less celebrated for his wit than for the cultivation of the severer sciences. His epigrams, however, involved him in many quarrels. He died in 1800.

KAFFRARIA, and **KAFFRES.** (See *Caffraria*, and *Caffres*.)

KAIN, LE. (See *Le Kain*.)

KAISERSLAUTERN; a town on the river Lauter, with 4550 inhabitants, a gymnasium and seminary for teachers, in Rhenish Bavaria, on the Hardtgebirge, famous, in modern times, for the battle of Nov. 28, 29 and 30, 1793, between the duke of Brunswick and a division of the French army of the Moselle, under Hoche, which attempted to relieve Landau. Another battle was fought near Kaiserslautern, May 23, 1794, and a third, Sept. 20, 1794, in both of which the French were unsuccessful. The passes leading from the Vosges to Landau and Mentz, both of which are German frontier fortresses, are situated here.

KALAH (*Arabic*, a fort); a word which enters into the compositions of many geographical names of the East. *Kelat* has the same meaning.

KALAMATA. (See *Greece*.)

KALAND (probably from *Kalendæ*); a lay fraternity, which originated in Germany in the thirteenth century. The members assembled on the first of each month, to pray for their deceased friends, after which they took a repast in common. In the course of time, the religious purpose of the assembly was forgotten, and the meeting became one of mere festivity, so that, at last, the fraternity was abolished on account of its excesses. The word *kaland* exists to this day in proverbs, &c.

KALB, baron de, a major-general in the American army, was born in Germany, about the year 1717. When young, he entered into the service of France, in which he continued for 42 years, and obtained the rank of brigadier-general. In 1757, during the war between England and France, he was sent, by the French government, to the American colonies, in order to learn the points in which they were most vulnerable, and how far the seeds of discontent might be sown in

them towards the mother country. He was seized, while in the performance of this commission, as a suspected person, but escaped detection. He then went to Canada, where he remained until its conquest by the British, after which he returned to France. In 1777, during the war of the revolution, he came a second time to the U. States, and offered his services to congress. They were accepted, and he was soon after made a major-general. At first, he was placed in the northern army, but when the danger which threatened Charleston from the formidable expedition under sir Henry Clinton, in 1778, rendered it necessary to reinforce the American troops in the south, a detachment was sent to them, consisting of the Maryland and Delaware lines, which were put under his command. Before he could arrive, however, at the scene of action, general Lincoln had been made prisoner, and the direction of the whole southern army in consequence devolved upon the baron, until the appointment of general Gates. Aug. 15, Gates was defeated near Camden by lord Rawdon, and, in the battle, baron de Kalb, who commanded the right wing, fell, covered with wounds, while gallantly fighting on foot. A tomb was erected to his memory, by order of congress, in the cemetery of Camden.

KALCKREUTH, Frederic Adolphus, count of, Prussian field-marshal, born at Eisleben, in 1737, entered the army in 1751. In the seven years' war, he served with distinction as aid of prince Henry, ascended, step by step, to the office of general, and was made a count in 1788. In the war with France, he manifested equal courage and ability. In 1793, he took Mayence. He contributed essentially to the victory of Möllendorf at Kaiserslautern, May 23, 1794. He soon after drove the French from Deux Ponts, and pressed forward to Saar Louis. Towards the end of 1795, he received the chief command of the troops in Pomerania, and, in May, 1806, was appointed governor of Thorn and Dantzic, and inspector-general of the cavalry. In the autumn, he joined the main army in Thuringia, but took no part in the battle of Jena and Auerstädt, being stationed in the rear. June 25, 1807, he concluded with Berthier, at Tilsit, the truce between Prussia and France, after which, in conjunction with Golz, he concluded a peace with Talleyrand. He was immediately after appointed field-marshal. In January, 1810, the king appointed him governor of Berlin. In the last war, count Kalckreuth was gov-

ernor of Breslau, and returned to Berlin in 1814, where he entered anew upon the government, and died in 1818. He was a man of rare qualities of mind and heart.

KALEIDOSCOPE; an instrument for creating and exhibiting an infinite variety of beautiful forms, pleasing the eye by an ever-varying succession of splendid tints and symmetrical forms, and enabling the observer to render permanent such as may appear appropriate for any branch of the ornamental arts. This instrument, the invention of doctor Brewster, in its most common form, consists of a tin tube, containing two reflecting surfaces inclined to each other, at any angle which is an aliquot part of 360°. The reflecting surfaces may be two plates of glass, plain or quicksilvered, or two metallic surfaces, from which the light suffers total reflection. The plates should vary in length, according to the focal distance of the eye: five, six, seven, eight, nine and ten inches, will, in general, be most convenient; or they may be made only one, two, three or four inches long, provided distinct vision is obtained at one end, by placing at the other an eye-glass, whose focal length is equal to the length of the reflecting planes. The inclination of the reflector that is in general most pleasing is 18°, 20°, or 22½°, or the 20th, 18th and 16th part of a circle; but the planes may be set at any required angle, either by a metallic, a paper, or cloth joint, or any other simple contrivance. When the two planes are put together, with their straightest and smoothest edge in contact, they will have the form shown in figure 1, where A B C is the aperture or angle formed by the plates. In this figure the plates are rectangular; but it may often be more convenient to give them the triangular form, shown at M figure 2, or N figure 3.

Figure 1.

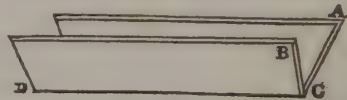
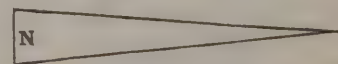


Figure 2.



Figure 3.



When the instrument is thus constructed,

it may be either covered up with paper or leather, or placed in a cylindrical, or any other tube, so that the aperture A B C may be left completely open, and also a small aperture at the angular point D. If the eye is now placed at D, and looks through the aperture A B C, it will perceive a brilliant circle of light, divided into as many sectors as the number of times that the angle of the reflectors is contained in 360° . If this angle is 18° , the number of sectors will be 20; and, whatever be the form of the aperture A B C, the luminous space seen through the instrument will be a figure produced by the arrangement of 20 of these apertures round C as a centre, in consequence of the successive reflections between the polished surfaces. Hence it follows, that, if any object, however ugly or irregular in itself, is placed before the aperture A B C, the part of it that can be seen through the aperture will be seen also in every sector, and every image of the object will coalesce into a form mathematically symmetrical, and highly pleasing to the eye. If the object be put in motion, the combination of images will likewise be put in motion, and new forms, perfectly different, but equally symmetrical, will successively present themselves, sometimes vanishing in the centre, sometimes emerging from it, and sometimes playing around in double and opposite oscillations. When the object is tinged with different colors, the most beautiful tints are developed in succession, and the whole figure delights the eye by the perfection of its forms and the brilliancy of its coloring. The eye-glass placed immediately against the end of the mirrors, as well as another glass similarly situated at the other end, are of common transparent glass. The tube is continued a little beyond this second glass, and, at its termination, is closed by a ground glass, which can be put on and off. In the vacant space thus formed, beads, pieces of colored glass, and other small, bright objects, are put. The changes produced in their position, by turning the tube, give rise to the different figures.

KALI; a genus of marine plants, which are burnt to procure alkali. (See *Alkali*, and *Kelp*.)

KALLIPYGOS. (See *Venus*.)

KALMIA; a beautiful North American genus of shrubs, having coriaceous, ever-green and cup-shaped flowers, of a fine rose or purple color, disposed in large corymbs. The corolla is provided with 10 little pits, prominent externally, and in which the anthers are confined. It is naturally

allied to *rhododendrum*. The *K. latifolia*, commonly called *mountain laurel*, or *calico bush*, is a large shrub, growing most abundantly on and about the Alleghany mountains, but sometimes in the vicinity of the ocean, in the Middle and Eastern States, as far north as lat. 43° . The trunk is sometimes three inches in diameter, and the wood is very hard, susceptible of a fine polish, and more nearly resembles box than any other North American wood. This shrub is in great request in the European gardens, from the beauty of its flowers and foliage. The other species of *kalmia*, four in number, are much inferior in stature and the size of the flowers, though still highly ornamental.

KALUGA; an extensive government of European Russia, bounded by those of Moscow, Smolensko, Tula and Orel, lying between $35^\circ 48'$ and $37^\circ 22'$ E. lon., and 51° and $54^\circ 30'$ N. lat. Its territorial extent is 8500 square miles. Its population was, in 1796, 853,000, and is now about 1,176,000. The chief products are corn, hemp and flax. The chief rivers are the Oka, the Upa and the Schisdra. This province contains iron mines.

KALUGA; capital of the above government, on the Oka. It has some very good public buildings, such as the high church, government house, &c.; but, in other respects, it is irregular, most of the houses being of wood, and ill built. Population, 25,000; 107 miles south-west Moscow; lon. $36^\circ 5'$ E.; lat. $54^\circ 3'$ N.

KAMEN, or **KAMIEN**; a Slavonic word, signifying *rock*, *stone*, and found in many geographical names, as *Kamin*, *Kamientz*, *Kaminietz*, &c.

KAMTSCHATKA; a large peninsula on the north-eastern coast of Asia, forming a district. On the east, it has the North Pacific ocean, and on the west that large gulf of it called the *sea of Okhotsk*. It extends from the 51st to the 62d degree of north latitude, and from $155^\circ 10'$ to $173^\circ 20'$ east longitude, and is reckoned upwards of 600 miles in length, and nearly 300 in breadth; square miles, 85,000. It is remarkable for its extreme cold, which is heightened by a range of very lofty mountains, extending the whole length of the peninsula. Several of these mountains are volcanic; but the most remarkable is one situated near Nijni Kamtschatsk, the volcano of which is very active, and two years seldom elapse without some violent eruption. Kamtschatka scarcely enjoys three months of an imperfect summer, and is very deficient in vegetable productions, particularly

grain. It has a great variety of animals which produce the richest and most valuable furs. The sable is more plentiful here than in Siberia, though its fur is not quite so beautiful. There are several varieties of the Arctic fox, or fire fox, in Kamtschatka. Other common animals are the beaver, the hare, the marmot, and the argali or wild sheep. The bear is the most formidable wild animal, and the hunting of it the most serious occupation of the Kamtschadales. The coasts and rivers swarm to a most extraordinary degree with fish, which form the main article of food of the inhabitants. The excellence of the salmon, herrings and different kinds of shell-fish, is particularly remarked. The air also is filled with game, particularly woodcocks, snipes, grouse, wild geese and ducks, the eggs of which last are collected by the natives, and preserved in the fat of fish. The only vegetable productions are stunted birch, and dwarf pines and cedar. Shrubs are more plentiful, such as the mountain ash, wild rose and raspberry. There is also a variety of berries. Copper and iron are worked. Sulphur abounds; and many minerals are found in the mountains. The trade of Russia with Kamtschatka is carried on from Irkoutsk by the difficult and tedious route of Okhotsk. The imports, besides brandy, are nankeens and other Chinese stuffs, together with various commodities of Russian and foreign manufacture, as ribbons, handkerchiefs, stockings, caps, shoes, boots, and, in general, all articles of European consumption, but in small quantity, and bearing a very high price. The only export is furs, the amount of which is valued at from 50,000 to 100,000 roubles. The capital is Nijni Kamtschatsk, with 300 inhabitants. The inhabitants are, in general, below the common height, have broad shoulders and large heads. The face, and particularly the nose, is long and flat, the eyes small and sunk, the lips thin, and they have scarcely any beard. In 1690, the Russians had some knowledge of this country. In 1696, they sent thither a detachment of Cossacks, under Morosko. The next year, part of the country was rendered tributary; but it was not till 1706, that all Kamtschatka was surveyed and occupied by the Russians. The sway which they have established is by no means severe; notwithstanding which, the Kamtschadales, like all savage nations coming in contact with civilized, have suffered deeply from the connexion. The number of inhabitants now amounts to only about 4500, of

which about 1500 are Russians and Cossacks. A century since, the number was 20 or 30 times larger. This diminution is to be ascribed to their bloody struggles to shake off the Russian yoke, to the small pox, the unnatural practices of the women to procure abortion, and to their excessive indulgence in spirituous liquors. There is besides a class of criminals banished to this inhospitable region, and a varying population of merchants, hunters and seamen. The Kamtschadales are an ugly branch of the Mongol race, and call themselves *Relmes*. They are good natured and hospitable, but given to the grossest sensuality. They are excessive eaters, practise lascivious dances, and are very dirty. Every Kamtschadale village (*ostroschok*) consists of several summer dwellings, built on piles, rising several feet from the ground; the occupants enter by ascending notched trunks of trees. In winter, the occupants of half a dozen of these *balagans*, as they are called, collect into a *jurta*, or winter dwelling, five feet deep, covered by a cone-shaped roof, and which cannot be entered, except by ascending the roof, and going down the chimney through the smoke. The clothing of the Kamtschadales is prepared from the skins of reindeer or dogs, but much of the Russian style of dress has been introduced. The Kamtschadale women alone perform the household occupations, while the men take their ease, if necessity does not drive them to hunt, or to fish, or to prepare tools for both these occupations, or to build sledges and houses. The objects of the chase are the fur-bearing animals and the reindeer; the principal fish taken are the whale and the seal. Barley, potatoes, turnips, cabbage, hemp, cucumbers, horse-radish, are mostly cultivated only by the Russians. The chief food of the Kamtschadales consists of fish, seasoned with whale and seal fat, and a kind of paste prepared of the tender birch bark. Their favorite drink is the juice of the birch. The chief domestic animal is the dog, which serves for draught, and the skins furnish clothing. To prepare the dogs for draught, they are castrated, and four to eight are attached to a little sled, 16 pounds in weight, and capable of carrying a man, at the rate of four or five miles an hour. These dogs require to be fed only in the winter; in the summer, they live on the fish which they pick up on the shores of the sea and the rivers. The Kamtschadale does not tame the reindeer, although all the neighboring people do. Since 1820,

swine and hens have been found here. The religion of the Kamtschadales was, and is still among the few who have not embraced Christianity, *Shamanism*. But even the Christian Kamtschadales have not relinquished their sorcerers or *shamans*. They believe in an almighty God, creator of the world, called *Kutka*, but do not worship him, because their innumerable *fetiches* absorb all their attention. They believe in the immortality of the soul, which they also ascribe to the meanest brute. They give to animals speech and reason, and believe that dogs are making inquiries of strangers when they bark at them. They relate also that, ages ago, a universal deluge covered the earth, out of which only one pair of human beings were saved.

KANGAROO (*macropus*, Shaw). These extraordinary animals, which are peculiar to Australasia, belong to the marsupial order of quadrupeds (those with an abdominal pouch), from the other genera of which they differ by having but two kinds of teeth, the canine being wanting. Their incisors are six in the upper jaw, and but two in the lower; the former short, and the latter long. The molars, which are separated from the incisors by a large vacant space, are 10 in number, in each jaw. The limbs of the kangaroo are strangely disproportioned; the fore legs being small and short, whilst the hinder are long and powerful. The tail is very thick at its base, gradually tapering, and appears to act as a supplemental limb, when the animal assumes its usual erect or sitting posture, in which position it is supported by the joint action of the tail and hinder legs. This conformation also enables it to take amazing leaps. The fore feet are furnished with five toes, each terminating in a moderately strong and hooked claw. The hinder feet, on the contrary, are provided with only four toes, one of which is long, of great strength, and terminated by a large and powerful claw, like an elongated hoof. The head and upper parts are small and delicate, and appear disproportioned to the posterior parts of the animal, which are robust and powerful. They use their tails and hinder feet as weapons of defence. When they are pursued and overtaken by dogs, they turn, and, seizing them with their fore feet, strike them with their hinder extremities, and often tear them to such a degree as to destroy them. The kangaroos feed entirely on vegetable substances, chiefly on grass. They associate in small herds, under the guidance of the older males.

The female has two *mammæ* in the abdominal pouch, on each of which are two teats; the younger at birth are very diminutive, not exceeding an inch in length. At this time, the mouth is merely a round hole, just capable of embracing the extremity of the nipple; but it gradually enlarges, till it can receive the whole of this part into its cavity, where it lies in a groove formed in the middle of the tongue. The young continues to reside in the pouch, till it has attained maturity, occasionally leaving it for exercise or amusement, but immediately seeking refuge in it on the least alarm. The flesh of these animals is said to be nutritious and savory, somewhat resembling mutton. They are capable of being domesticated, in which state they are harmless and even timid. The species of these singular animals have not hitherto been satisfactorily determined, as the differences on which the distinguishing characters of each have been founded, are merely those of size and slight modifications of color.

KANSAS. (See *Indians*.)

KANSAS, or **KANZAS**, or **KANSEZ**; a river of North America, which rises in the Rocky mountains, and, after an easterly course of about 1200 miles, unites with the Missouri, 340 miles from the Mississippi, in lon. 94° 20' W. ; lat. 38° 31' N.

KANT, Immanuel, born in Königsberg, in Prussia Proper, April 22, 1724, was the son of a harness-maker, in the suburbs of his native place—a man of integrity and respectability, though of a humble station. Kant's mother was a woman of great piety, and much attached to the strict tenets and discipline of doctor Schultz, a professor of theology at the university of Königsberg, a distinguished divine in his day. Though far from being in easy circumstances, his parents resolved to bestow upon their son Immanuel the advantage of a liberal education. After having learned to read and to write in the charity school of the suburb, Kant was sent, in 1732, to the *Collegium Fredericianum*, at the suggestion of doctor Schultz, who, even at that early period, had the penetration to discover the talents of the boy. At this school, he contracted an intimate friendship with Rhunken, afterwards so celebrated as a philologist. Both were indefatigable students, and read and studied much together. It is remarkable that, at this period, Kant devoted his attention principally to philological studies, while his friend Rhunken seemed to have more fondness for philosophy. In their maturer years, they exchanged pursuits. In

1740, Kant repaired to the university of his native city, and, at first, studied theology, in consequence of the necessity of depending entirely on his profession for future maintenance. But at no period did he neglect philosophy and mathematics. Hardly had he arrived at the age of manhood, when he lost both his parents, who, indeed, had never been able to afford him much pecuniary assistance; but he was fortunate enough to meet some relations, whose aid, together with his own industry and economy, enabled him to continue his studies. His application was uncommonly great, as is proved by his bold and successful attacks on the doctrines of Leibnitz and Wolf, and his skilful use of the weapons of dialectics against the authority of the most eminent metaphysicians of the day, when he was but 22 years of age. After a residence of about three years at the university, he acted in the capacity of a private tutor in several families, and lived about nine years with count Hüllesen, at Arnsdorf. Kant read much in this retirement, and traced the outlines of several of those philosophical treatises, which were soon afterwards published in rapid succession. In 1755, he returned to Königsberg, took the degree of M. A., and produced, on this occasion, in the form of an inaugural dissertation, his treatise, entitled *Principiorum primorum Cognitionis metaphysicæ nova Dilucidatio*. In the same year, he published his celebrated work on the Universal Natural History and Theory of the Heavens, or an Essay on the Constitution and Mechanical Structure of the whole Globe, according to the Newtonian System. In this treatise, he anticipated several of the subsequent discoveries of the astronomer Herschel, particularly the planet called after his name. Kant began to lecture, as *doctor docens*, on logic, metaphysics, mathematics and natural philosophy, to which, at subsequent periods, he added natural law, moral philosophy, natural theology, and physical geography. He soon became popular with the students; but it was long before he obtained a professorship. He had no ambition beyond that of being useful in the sphere which he had chosen, nor could his noble and strictly upright character resort to any kind of art to promote his worldly interest. In 1756, the *professor extraordinarius* of philosophy, Mr. Knutzen, died; but Kant solicited in vain the vacant chair. In 1758, the *professor ordinarius* of philosophy died; but Kant was not appointed in his stead, though zealously aided by doctor Schultz. In 1766, he accepted the

unsolicited situation of second keeper of the royal library, to which a small salary was attached; and, at the same time, he undertook the management of a private cabinet of curiosities. But these offices he resigned in 1772, on account of the interruptions to which he was exposed by the necessity of showing the books and rarities to strangers. In 1770, he was at length advanced to the ordinary professorship of logic and metaphysics in the university, to the lustre of which he had already so long contributed. He was now placed above the fear of want, and could employ his talents in a manner satisfactory to himself. Upon this occasion, he produced his celebrated inaugural dissertation, *De Mundi sensibilis atque intelligibilis Forma et Principiis*. In 1787, Kant was made a member of the royal academy of sciences at Berlin. Having once attained independence, his wish to improve his worldly concerns seems to have aspired no higher. He declined various advantageous proposals to transfer his talents to other universities, and, at length, died by a gradual decay, Feb. 12, 1804, in the 80th year of his age, having witnessed the great sensation which his philosophy produced among his countrymen, though his patience was exposed in this particular also to severe trials. Six years elapsed before much notice was taken of his great work, the Critique of Pure Reason; and it is even said, that the publisher of it was about to use the numerous copies of the work which remained on hand as waste-paper, when the demand suddenly increased, and three editions were disposed of in quick succession. Kant never went farther from Königsberg than to Pillau, seven German miles (about 32 English) distant. In the earlier part of his life, he used to dine at the ordinary of the principal tavern; to which custom he was undoubtedly indebted in part for his knowledge of mankind. Reichardt, in the *Urania* (a German souvenir) of 1812, describes Kant as an extraordinarily lean, small man. "Leaner, nay, drier," he says, than his small body, none probably ever existed, and no sage probably ever passed his life in a more tranquil and self-absorbed manner. A high, serene forehead, a fine nose, and clear bright eyes, distinguished his face advantageously. But the lower part of his countenance was marked with a strong expression of sensuality, which was conspicuous in his habits at table. He loved a mirthful company at a good dinner, and was himself an agreeable companion, who never failed to entertain and enliven the

company by his extensive knowledge, and an inexhaustible store of pleasing anecdotes, which he used to tell in the driest way, without ever laughing himself; and by the humor of his repartees and observations. Kant's company was sought for by the first families of Königsberg, the more as he stood in the greatest esteem for his virtue and a noble pride, which well became the most distinguished man of the city, and one of the deepest philosophers who have ever lived. He was, in his exterior, always neat, and even highly dressed. Kant was also fond of playing at cards, and he did not like to spend an evening without a game of ombre. He considered it as the only certain means of withdrawing his mind from deep thought, and tranquillizing it. He possessed a boundless memory, which added much to the interest of his lectures, as he interspersed them with many illustrations, with which his immense reading in history, biography, travels and novels, in fact, all works which could add to the stores of his knowledge, amply supplied him. Though he had his notes before him, he seldom looked at them, and often quoted whole lines of names and dates from memory. His library was very small, but he had made a contract with a bookseller, who sent him all new publications, which, after reading, he sent back. He lectured the greater part of the forenoon, allowing himself 20 minutes rest between each lecture. In the afternoon, he lectured seldom. He rose early, and studied then most ardently. His lectures on abstract philosophy were much easier to be understood than his works, because, in the former, he added many elucidations, examples and explanations, which he thought unnecessary in his printed works. Besides the great merits of Kant in regard to intellectual philosophy, we owe him much for his virtue and inflexible morality, which he placed again on their true elevated basis, after they had been referred exclusively to interest by Helvetius and others. As to the philosophy of this profound thinker, a full account cannot be expected in a work of this sort; a glance at it will be all which we can give. The inquirer into Kant's philosophy should be careful not to reject immediately what he cannot understand, and ought not to expect to understand, without deep study and strict mental discipline. To form an opinion of a whole philosophical system from the pages of a review, is more easy than satisfactory or profitable. In fact, a man can hardly hope to acquire a good idea of

Kant's philosophy without reading him in the original. When Kant appeared, two philosophical systems were most in vogue—the sensualism of Locke and his followers, and the idealism of Leibnitz, Wolf, &c. Kant saw that little aid was rendered to the cause of truth by a dogmatic philosophy, whether founded on sensualism or idealism. He wished for certainty in the field of philosophy, and put to himself the questions—What can I know? What is it that I know originally? The acute skepticism of Hume had had its influence upon him. Hume proved very satisfactorily, that our ideas of cause and effect are not derived from experience; but he rashly concluded, as Kant observes, “that they are the spurious offspring of the imagination, impregnated by custom.” Kant discovered that Hume had been led to this hasty inference in consequence of having taken too limited a view of the great problem which he had thus partially attempted to solve. He perceived that the idea of cause and effect is by no means the only one which the mind makes use of with the consciousness of its necessity, yet without having derived it from experience. This he found in his endeavors to ascertain what we can know, which led him to the fundamental laws of the mind. Having arrived at this conclusion, he strove to ascertain the exact number of these original or transcendental ideas, or imperative forms; that is, such ideas as we do not derive from experience, but by which, on the contrary, we acquire experience. In the first rank of these, are *space* and *time*. Kant shows that all our perceptions are submitted to these two forms: hence he concludes, that they are within us, and not in the objects; they are *necessary* and *pure intuitions* of the internal sense. Truths acquired by experience never carry with them that absolute certainty; for instance, experience teaches us that the sun rises every day; that all men are mortal; yet we may imagine a day when the sun does not rise, and a man who does not die; but imagination itself cannot suppose any thing unconnected with space and time. This primitive intuition must have, as its basis, the primary laws of the understanding, without which we can comprehend nothing. As far as the transcendental ideas, or, as Kant calls them, *categories*, extend, so far extends the knowledge of the understanding *a priori*. Kant was at great pains in endeavoring to ascertain the number of these categories, and he found them to be all comprehended under the four classes

of quantity, quality, relation and modality. The categories themselves are 12 in number. Under the first head are comprised *unity, multitude, totality*; under the second, *reality, negation, limitation*; under the third, *substance and accident, cause and effect, action and reaction*; under the fourth, *possibility, existence, necessity*. These categories are necessary and indispensable for our understanding, as the forms of space and time were for our perceptions; we cannot figure to ourselves any thing without the relations of cause and effect, of possibility, quantity, &c., which, with other words, is, we cannot perceive any thing except by these original, necessary, unchangeable forms of thought. Hence the demonstrative certainty of mathematics, the objects of which—space, time, quantity, &c.—lie in the necessity of the forms of thought, and not in the range of error to which experience is subject. To produce results, the categories are applied to exterior objects, objects of experience, in which application they are subject to error. The three original faculties, through the medium of which we acquire knowledge, are *sense, understanding, reason*. Sense, a passive and receptive faculty, has, as has been already stated, for its forms or conditions, *space and time*. Understanding is an active or spontaneous faculty, and consists in the power of forming conceptions, according to the categories already given, which categories are applied to objects of experience through the medium of the two forms of perception, *space and time*. Reason is the third or highest degree of mental spontaneity, and consists in the power of forming ideas. As it is the province of the understanding to form the intuitions of sense into conceptions, so it is the business of reason to form conceptions into ideas. The work in which Kant endeavored to ascertain these categories and the province of certain human knowledge, is his *Kritik der reinen Vernunft*—Critical Inquiry into the Nature of Pure Reason (1st edition, Riga, 1781; 6th edition, Leipsic, 1818). Far from rejecting experience, Kant considers the work of all our life but the action of our innate faculties on the conceptions which come to us from without. The philosophy thus started was called *critical philosophy*—a very poor name, but which has now become settled. Kant proceeds in a similar way with morality; the idea of good and bad is a necessary condition, an original basis of morals, which is supposed in every one of our moral reflections, and not obtained by ex-

perience. He treats this part of his philosophy in his *Kritik der praktischen Vernunft*—a Critical Inquiry into Practical Reason (1788; 5th edition, Leipsic, 1818). Kant places unreservedly on two parallel lines all the arguments for and against human liberty, the immortality of the soul, the transitory or eternal duration of the world; and resorts to the feelings to make the balance incline, because the metaphysical proofs on the opposite sides are equally great. These opposite arguments on great questions are called, in the works of Kant, *antinomies*. In aesthetics, also, he pursues a similar course, and treats it in his *Beobachtungen über das Gefühl des Schönen und Erhabenen* (Riga, 1771)—Observations on the Feeling of the Beautiful and Sublime. Another important work of his is the *Kritik der Urtheilskraft*—Critical Inquiry into the Faculty of Judgment (Berlin, 1790; 3d edition, 1799). We must also mention *Metaphysische Anfangsgründe der Rechtslehre*—Metaphysical Elements of Legal Science (1797; 2d edition, 1803); *Metaphysical Elements of Ethics* (1797; 2d edition, 1803); *Metaphysical Elements of Natural Science* (1786; 3d edition, 1800); a *Pragmatical Treatise on Anthropology* (1798; 3d edition, 1821); *Of Perpetual Peace* (1796); *Religion considered within the Limits of Reason* (1793); the only possible Evidence for demonstrating the Existence of the Deity (1763; last edition, 1794). Most of Kant's smaller treatises, full of acute remarks, are contained in his *Kleinere Schriften*—Smaller Works (Königsberg and Leipsic, 1797, 3 vols.), and in the collection edited by Tieftrunk (Halle, 1799, 3 vols.). Hufeland, the physician, published Kant's work, *Of the Power of the Mind, by mere Resolution, to control its morbid Feelings*, with notes (2d edition, Leipsic, 1824). Kant, of course, met with many opponents, the most prominent among whom were Mendelssohn, Hamann, Feder, Garve, Platner, Flatt, Jacobi, Herder, and particularly G. C. Shultze, as *Ænesidemus* (1792), and in his *Kritik der Theoretischen Philosophie* (Hamb., 1801, 2 vols.). But his adherents were the more numerous party, and his philosophy has been taught in all the German universities, excepting some Catholic ones. A very good enumeration of Kant's works, and those of his opponents, as well as of his commentators and followers, is to be found in Tennemann's *History of Philosophy*, or Cousin's *Manuel de l'Histoire de la Philosophie traduit de l'Allemand de Tennemann* (Paris, 1829, vol. 2).

KAPNIST. (See *Capnist*.)

KARA, in the Tartar languages; black, as *Karamania* (black people, country of the). In opposition to another word of the same idiom which signifies *white* and *free*, *kara* has been used to signify *tributary*, e. g., *kara Kalpacks* (tributary Kalpacks).

KARAITES. (See *Caraites*.)

KARAMSIN, Nicolas, imperial Russian historiographer, born in 1765, educated at Moscow, in the house of professor Schaden, entered the military service, and travelled, from 1789 till 1791, through Middle Europe. He is esteemed by many the first original prose writer of Russia. Of his *History of the Russian Empire*, 11 volumes had appeared in 1824. It has been translated into French, both at Paris and St. Petersburg. This history extends to 1613, to the house of Romanoff. His other writings are *Letters of a Russian Traveller*, *Aglaiä*, a collection of tales (Moscow, 1794, 2 vols.), &c. His songs are too sentimental. The emperor Alexander conferred on him the order of St. Anne, and gave him 60,000 rubles for the publication of his great work. A free residence was also allowed him in a pleasure castle of the empress Catharine II, and all the archives opened to him. The third edition of Karamsin's works appeared in 1815, in nine volumes. Of his *History of the Russian Empire*, in the original, the second edition appeared in 1818. When on the point of making a journey into foreign countries, he died, June 3, 1826. Just before his death, the emperor had granted him a pension of 50,000 rubles, which was continued to his widow and children. Mr. Bowring has translated some of his poems.

KARIKAL; a French city on the coast of Coromandel, surrounded by the English territories, 26 leagues from Pondicherry, under the jurisdiction of which it is. It produces a net revenue of 300,000 francs a year. Population, 15,000; population of the territory, about as many more.

KARL; the German name for *Charles*, appearing in many geographical names, as *Karlstadt*, *Karlsruhe*, *Karlsbad*. *Karl* is of the same origin as *kerl*, which means, at present, a strong, sturdy fellow, formerly a valiant, powerful man. It is the same with the English *cearl* or *churl*.

KARLSBAD, **KARLSRUHE**, **KARLSTADT**, &c. (See *Carlsbad*, &c.)

KARSCHIN, Anna Louisa (properly *Karsch*), a German poetess, was born Dec. 1, 1722, near Schwibus, on the frontiers of Silesia. Her father kept an alehouse.

He died while she was young, and her mother, fearing that the eagerness for reading and writing which she displayed would make her neglect domestic occupations, withdrew her from the house of her uncle, who had undertaken the care of her education, and employed her three years in taking care of the cows; but she still contrived to gratify her desire of knowledge; for, having become acquainted with a shepherd boy who brought her books, mostly poor ones, she read them secretly. Her mother married her to a weaver, whom she never had seen. This union was unhappy, and, after eleven years, was terminated by a divorce. She was now utterly destitute; and, a year after, her mother married her to a drunken tailor, Karsch, whom Karschin hated. She now supported herself by selling occasional poems of her own composition, and by exhibiting as an improvisatrice about the country; but her drunken husband spent all her money. She finally attracted the attention of some influential man, and went to Berlin, where Ramler, Mendelssohn, Gleim, &c., encouraged her. Sulzer, who called her the *German Sappho*, published some of her poems in 1764, which produced her a considerable sum. She was admitted into the first society, and received several small pensions, but was not able fully to support herself, her two children and her brother. Frederic II took no interest in her, and did not give her the pension he had promised; but his successor, Frederic William II, ordered a convenient house to be built for her, which, however, she did not enjoy long, as her death took place in Oct., 1791. Her daughter published part of her poems, with her life, in 1792; new edition, 1796.

KASAN; an extensive province or government of European Russia, lying between 46° 20' and 49° 40' E. longitude, and 54° and 57° N. latitude, and surrounded by the governments of Viatka, Orenburgh, Niznei-Novgorod, and Simbirsk. Its territorial extent is over 22,000 sq. miles; its population about 1,000,000, partly Russians, and partly Tartars, though of very mixed origin. The rivers are the Wolga, the Kama, the Sura, the Viatka, and the Kasanka, besides smaller streams, and a great number of lakes.

KASAN; a city of Russia, on the Kasanka, about four miles above its junction with the Wolga. Many Mohammedan Tartars still reside there, engaged in business. It is a bishop's see, and the seat of a small university, founded in 1803. It has also several other schools. Here are

large soap-works and tanneries; also manufactures of woollen, cotton, lace, and earthen ware. It carries on an extensive trade. The caravans to Bucharra and China pass through Kasan. At a little distance from Kasan is a new admiralty establishment, with a navigation school, magazines, and a dock-yard, where gallies are constructed, and sent down the Wolga to the Caspian sea. Population, 25,000. 208 miles E. by S. Niznei-Novgorod; lon. 49° 21' 9" E.; lat. 55° 47' 51" N.

KATAHDIN; a mountain in the state of Maine, situated between the eastern and western branches of the Penobscot river. It is a detached mountain, steep on all sides, and extremely rugged. It was reputed, by the aborigines, to be the residence of supernatural beings. But few persons have visited its summit. It commands a very extensive view, embracing no less than 63 lakes. Its height, as ascertained by barometrical observations, is 4685 feet above the level of the west branch of the Penobscot at its base, and about 5335 feet above the ocean. It may be seen, in a clear day, from Bangor, a distance of 70 miles, and from Dixmont, 80 miles distant.

KATT. (See *Frederic II.*)

KATZBACH; a small river in Silesia, passing near Leignitz, famous for the victory which the Prussians and Russians under Blücher gained, Aug. 26, 1813, over the French under Macdonald, Ney, Lauriston and Sebastiani. It rained from August 24 to the 28th. Fire-arms could not be used, and the battle was fought hand to hand. It was short, and was terminated by a furious struggle between the Prussian cavalry under Blücher and the French under Lauriston, together 8,000 men. The French were broken, and were driven, horse and man, into the raging Neisse and Katzbach. Great numbers perished in the swollen streams. The result of the battle was more surprising, as a great part of the Prussian troops were raw militia. It is one of Blücher's greatest victories. During the battle and the following days, 103 French cannon were taken, two eagles, and 18,000 prisoners. Silesia was delivered, and the consequences were most important, particularly for Bohemia. The battle of the Katzbach took place on the same day that Napoleon repelled the attack of the allies on Dresden.

KAUFMANN, Angelica, a distinguished painter, born at Coire, in the Grisons, in 1741, received her first instruction in drawing and painting from her father,

who, at the time of her birth, was painter to the bishop. Her admiration of the beautiful was early developed. She loved music, and made great progress in painting, under the guidance of her father, whose talents were but moderate, and whom she soon excelled. On her first journey to Italy, where she resided from her 13th year till 1769, in Milan, Florence, Rome and Naples, she acquired great skill; and her subsequent visit to London, where she painted the whole royal family, increased her reputation and improved her circumstances. Here she was elected a member of the royal academy, and here, also, she contracted an unfortunate marriage, of which the following circumstances are related. An English artist, who had paid his addresses to her, offended by her refusal, determined on vengeance. A handsome young man, chosen from the lowest class, was enabled to appear in the house of Angelica, and to become her suitor. She suffered herself to be deceived, and became his wife. The rejected artist now disclosed the deceit. Angelica obtained a divorce, but was obliged to settle an annuity on her husband. He, however, soon died. After her return to Rome in 1782, she was married a second time, more happily, to a Venetian painter, Zucchi, but she never had any children. Zucchi, likewise, died long before her. Angelica then devoted herself to painting till her death, in 1807. Her bust was placed, in 1808, in the Pantheon. She left a select library, some beautiful original paintings of old masters, and a considerable fortune, which she divided among several individuals and charitable institutions. She painted many portraits and historical pictures, the latter chiefly after antiques. She preferred ideal female figures. Her works are remarkable for grace, though the critic may discover in them incorrectness of style and sameness of plan and execution.

KAUNITZ, Wenceslaus Anthony, prince of, knight of the golden fleece, fifth son of count Kaunitz, and one of nineteen children, was born in Vienna, in 1711, and was at first destined for the church, but, after the death of all his brothers, engaged in political life. His talents, aided by a favorable exterior, opened a brilliant career to him. After having studied at Vienna, Leipsic and Leyden, he entered upon his travels, in 1732. In 1741, he was sent to pope Benedict XIV, and to Florence, on a secret mission, by Maria Theresa. In 1742, he went as Austrian ambassador to Turin, where he accom-

plished his mission to unite Sardinia more closely with Austria against the Bourbon courts so successfully, that, in 1744, he was appointed minister at the court of Charles, duke of Lorraine, then governor-general of the Austrian Netherlands. He conducted the most difficult affairs, in a highly crucial state of the Netherlands, to the greatest satisfaction of the empress; but his feeble health obliged him to ask his dismissal, and he returned to Vienna. Soon afterwards, however, he appeared as minister plenipotentiary at the congress of Aix-la-Chapelle (q. v.), where he laid the foundation of his fame as a diplomatist. From 1750 to 1752, he was minister at Paris, and prepared the union of Austria and France, which took place in 1756. In 1753, he had been made court and state chancellor, and, in 1756, was created chancellor of Italy and the Netherlands. Thus he not only managed the foreign affairs of Austria, under Maria Theresa, but had also the greatest influence upon the domestic concerns. In 1764, the emperor, Francis I, raised him to the dignity of prince. As long as Maria Theresa lived, her confidence in Kaunitz was unbounded; but the emperor Joseph did not implicitly follow his advice; of which the unsuccessful attempt to open the Scheldt and to exchange Bavaria, as well as the unfortunate war with Turkey, were consequences. Under the reign of Leopold II, the influence of prince Kaunitz was still less. When Francis II ascended the throne, his advanced age induced him to resign the office of court and state chancellor. He made up his opinions slowly, and after mature consideration. Voltaire was his favorite author, and he had much esteem for Rousseau, who had been for a few weeks his private secretary at Paris. In Lombardy and the Netherlands, he instituted academies. Learned men found free access to him, and he cultivated the arts. The school of art at Vienna is almost entirely his work. Several painters and engravers were indebted to him for his patronage. His love of dress was considered extravagant. He was strictly honest and faithful. He rarely laughed, yet he was affable to all below him in rank. Under Joseph's government, Kaunitz ceased to appear at court, but the emperor often went to visit him, and received much assistance from him in his ecclesiastical reforms; hence he was called, by the court of Rome, *il ministro eretico*; yet, when the pope was at Vienna, he gave him, as a matter of policy, not the back, but the palm of his hand to kiss, which was for-

merly considered the highest favor; but the prince, pretending not to understand this etiquette, took the hand of the pope in his, and gave it a hearty shake. He died in 1794, with the reputation of one of the ablest ministers Austria had ever produced, and the still greater fame of a man of noble character. No minister was ever treated with a longer and more intimate confidence, which was founded equally on his talents and his strict integrity.

KEAN, Edmund; a famous English actor, born in London, Nov. 4, 1787. His father, a poor builder or tailor, procured a situation for him as a figurant in the pantomimes at Drury-lane theatre, when he was only two years old; but here, by the unnatural and forced positions which he had to practise in order to make his limbs more pliable, he became deformed. Some of the actors procured him surgical assistance, his limbs were supported, and he finally outgrew his bodily defects. At seven years, his mother sent him to a little school; but order and obedience were not in his character, and he engaged himself as cabin-boy in a vessel going to Madeira. This situation, however, equally displeased him, and, to deliver himself, in Madeira, he feigned deafness, and played his part so well, that the captain sent him home. In London, he could not find out his mother; but a woman who had had him under her care recommended him to Miss Tidswell, an actress at Drury-lane theatre, who gave him much assistance. At one period, after his return to London, he exhibited as a droll, in a booth. After this, he was placed in one of the minor theatres, and was much applauded in Rolla's address to the Peruvians. From this period, he commenced reading dramatic productions. His protectress recommended him to a company of players in Yorkshire, where he appeared under the name of Carey. Although not more than 13 years old, he performed the parts of Hamlet, Lord Hastings, and Addison's Cato, well enough to please a provincial audience. In Windsor, his talent was applauded by the royal family, in Satan's address to the sun, from *Paradise Lost*, and the first soliloquy in Shakspeare's *Richard III*. About this time, he was fortunate enough to attract the attention of doctor Drury, who sent him to Eton, where he remained three years, and is said to have made much progress in classical studies. On leaving Eton, he again took the name of Carey, and went from stage to stage. Playing Hamlet in the

island of Guernsey, a journal there abused him; and when he afterwards performed Richard, he was received with exclamations of displeasure. Kean, for a while, patiently submitted, but very significantly addressed a passage from his part to the pit—"Unmannered dog, stand thou, when I command." Upon this, the disorder increased, and, instead of apologizing, he addressed his audience to the following effect:—"You have shown some symptoms of understanding in applying the words to yourselves." He had to pay dear for this impudence; was obliged to leave the town, and remained in great distress, till some of his friends interceded for him with the governor of the island. Kean afterwards went to Dorchester. In the mean time, doctor Drury, his old patron, had recommended him to the directing committee of Drury-lane, as fitted to revive this declining theatre. He was, in consequence, engaged for three years at Old Drury. Kean appeared for the first time on the London boards, Jan. 26, 1814, in the character of Shylock. The first evening was decisive; but his Richard III made him the idol of the Londoners. In Othello, also, and sir Giles Overreach, he has been unequalled by any contemporary. When he performed Massinger's Jew the first time, the actors, and others of his admirers, presented him with a gold cup, as a token of their esteem (June 25, 1814). In 1820, he visited the United States, and performed in New York, Philadelphia, Baltimore, and Boston, on the whole, with great success. After his return to England, the extravagance and dissoluteness which had always disgraced his character, involved him in great embarrassments, and a second visit to America, in 1825, was attended with little credit or advantage.

KEATS, John; a young English poet, of humble origin, born Oct. 29, 1796, at a livery-stable kept by his grandfather in Moorfields. He was sent to school at Enfield, where he remained till the age of fifteen, and was then bound apprentice to a surgeon; but his inclination to poetry having been cultivated by his teachers at school, he gave way to the ambition of becoming a poet. Keats's first volume of poems, many of which were written in his teens, made its appearance in 1817, when he was in his twenty-first year. This was followed by *Endymion*, a Poetic Romance, in 1818; and, in the year 1820, he published his last and best work, *Lamia*, *Isabella*, and other Poems. Being in feeble health, he was prevailed upon to try

the climate of Italy, where he arrived in November, 1820, and died in Rome, on the 27th of December following. His death has been attributed to the attacks of critics; but it was, in fact, owing to a consumptive complaint of long standing. Mr. Keats had great sensibility and imagination. His *Endymion*, with all its faults, has much beauty. The fragment of *Hyperion*, his last performance, obtained the admiration of lord Byron.

KEBIR; an Arabian word, which signifies *large*, and is found in many geographical names.

KEBLA. (See *Kaaba*, and *Koran*.)

KEDGE, or KEDGER; a small anchor, used to keep a ship steady and clear from her bower-anchor, while she rides in a harbor or river, particularly at the turn of the tide, when she might otherwise drive over her principal anchor, and entangle the stock or flukes with her slack cable, so as to loosen it from the ground. The kedge-anchors are also used to transport a ship, or remove her from one part of a harbor to another, being carried out from her in the long-boat, and let go by means of ropes fastened to these anchors. They are also generally furnished with an iron stock, which is easily displaced for the convenience of stowing. (See *Anchor*.)

KEEL; the principal piece of timber in a ship, which is usually first laid on the blocks in building. By comparing the carcass of a ship to the skeleton of the human body, the keel appears as the back-bone, and the timbers as the ribs. The keel supports and unites the whole fabric, since the stem and stern-posts, which are elevated on its ends, are, in some measure, a continuation of the keel, and serve to connect and enclose the extremities of the sides by transoms, as the keel forms and unites the bottom by timbers. The keel is generally composed of several thick pieces placed lengthways, which, after being scarfed together, are bolted and clinched upon the upper side.

False Keel; a strong, thick piece of timber, bolted to the bottom of the keel, which is very useful in preserving its lower side. The false keel is provided when the thick pieces which form the real keel cannot be procured large enough to give a sufficient depth thereto. In large ships of war, the false keel is composed of two pieces, called the *upper* and *lower* false keels. The lowest plank in a ship's bottom, called the *garboard streak*, has its inner edge let into a groove or channel, cut longitudinally on the side of the keel: the depth of this channel is therefore rag-

ulated by the thickness of the garboard streak.

KEEL-HAULING; a punishment inflicted for various offences in the Dutch navy. It is performed by suspending the culprit by a rope from one yard-arm, with a weight of lead or iron upon his legs, and having another rope fastened to him, leading under the ship's bottom, and through a block at its opposite yard-arm. He is then suddenly let fall from the one yard-arm into the sea, where, passing under the ship's bottom, he is hoisted up on the opposite side of the vessel to the other. This punishment is not altogether unknown in British ships; but, as it is dangerous, it is very rarely, or, indeed, scarcely ever, now practised.

KEELSON, or **KELSON**; a piece of timber forming the interior or counterpart of the keel, being laid upon the middle of the floor timbers immediately over the keel, and serving to bind and unite the former to the latter, by means of long bolts driven from without, and clinched on the upper side of the keelson. The keelson, like the keel, is composed of several pieces scarfed together; and, in order to fit with more security upon the floor timbers and crotchets, it is notched about an inch and a half deep, opposite to each of those pieces, thereby scored down upon them to that depth, where it is secured by spike-nails. The pieces of which it is formed are only half the breadth and thickness of those of the keel.

KEENERS; the name of the Irish singing mourners. The Irish have always been remarkable for their funeral lamentations, and once were celebrated for their musical art, in the last sad offices to their departed friends. Formerly, these duties were performed by dressing the body of the deceased in grave-clothes, ornamenting it with flowers, and placing it on a bier; when the relations and keeners, ranging themselves in two divisions, one at the head and the other at the feet of the corpse, the chief bard of the head chorus, softly accompanied by the harp, sung the first stanza of the *caoinan*, or funeral song. This being ended, the foot semi-chorus began the lamentation, or *ul-laloo*, in which they were answered by the head semi-chorus, and then both united in one general chorus. After this, the chief bard of the foot semi-chorus began the second *gol*, or lamentation, in which he was answered by that of the head; and then, as before, both united in the general full chorus. Thus, alternately, were the song and choruses solemnly performed

during the night. But whatever merit or decorum there might formerly be in these vocal obsequies of the Irish, they have, at present, little to boast, either of melody, harmony or dignity. The keeners now generally consist of a motley multitude of men, women and children, and the *caoinan* is degenerated into a wild and hideous howl.

KEEP, in ancient military history; a kind of strong tower, which was built in the centre of a castle or fort, to which the besieged retreated, and made their last efforts of defence. It is also called the *donjon*, or *duncheon*.

To keep; a term used, on several occasions, in navigation; as, *to keep the land aboard*, is to keep within sight of land as much as possible.—*To keep the huff*, or *the wind*; to continue close to the wind; i. e. sailing with a course inclined to the direction of the wind as much as possible.—*To keep off*; to sail at a distance from the shore or a ship, &c.

KEEPER OF THE GREAT SEAL (see *Chancellor, Lord High, of England*); for the office and privileges of the French keeper of the seals (*garde des sceaux*), before the French revolution of the last century, see *Chancellor*. The *garde des sceaux*, or keeper of the seals, in France, is at present always minister of justice. On the continent of Europe, the department of justice is directed in the same way as the finances, &c., at the head of which stands a *chef*, or minister.

KEEPER OF THE PRIVY SEAL, in England, is a lord by virtue of his office, through whose hands pass all charters signed by the king, before they come to the great seal.

KEEPER OF THE KING'S CONSCIENCE. (See *Chancellor*.)

Boat Keeper; one of the boat's crew who remains as a sentinel, in his turn, to take care of the boat and her contents when she is ashore, or along-side of a ship, or is towed astern of her.

KEEPING, in painting, is a technical term, which signifies the peculiar management of coloring and *chiaro oscuro*, so as to produce a proper degree of *relievo* in different objects, according to their relative position and importance. This may be effected either by shade or color, either by throwing a shadow across the inferior objects, or by tinting them with a color less bright than that given to others, and, in very skilful hands, it may even be done by the directly reverse practice. As the objects recede in the ground plane, the hue of the atmosphere, intermixing with their *proper* or *local* color, as it is termed,

will assist in their keeping. On keeping, *relievo* entirely depends; for, if the lights, shadows and half tints be not kept in their exact relative proportions of depths, no rotundity can be effected, and, without due opposition of light, shade and colors, no apparent separation of objects can take place. The celebrated Raphael has, in two instances, totally failed of proper keeping—in the Transfiguration, and the miraculous Draught of Fishes.—The word *keeping* is also sometimes used of works in other branches of the fine arts, as of a drama, to denote the just proportion and relation of the various parts.

KEHL; a village in the grand-duchy of Baden, formerly a fortress of the German empire, situated at the influx of the Kinzig into the Rhine, over which there is a bridge to Strasburg, about two miles distant. The fortress was built by the French, towards the end of the seventeenth century, and was intended to aid Louis XIV's plans of conquests on the right bank of the Rhine. By the peace of Ryswick, in 1697, Kehl was ceded to the margrave of Baden-Baden, the empire retaining the right to garrison it. In the middle of the last century, the fortifications were demolished, and Kehl became the seat of manufactures. Here Beaunarchais established his printing press, from which proceeded his edition of Voltaire and other magnificent editions. During the revolutionary war, the fortifications were rebuilt. Kehl has sustained several sieges (the severest in 1796), has been alternately in French and German hands, and has been three times burnt down. In 1808, it was included in the department of the Lower Rhine: in 1814, it was restored to Baden. In 1815, the works were again demolished. It has 980 inhabitants.

KEISER, one of the earliest German opera composers, born at Leipsic, in 1673, died 1739. He left 118 operas, besides much church-music, full of originality, and distinguished by a noble and pure style. Being, besides, self-formed, he deserves to be ranked among the first composers.

KEITH, James; a brave and experienced warrior, as well as an able and successful politician, field-marshal of Prussia, and the confidential friend of its sovereign. He was descended of a noble house in Scotland, being the youngest son of William Keith, earl-marshal of that kingdom, and was born in 1696. The breaking out of the rebellion, in 1715, developed his military propensities, and gave the future color to his fate. His mother, warmly

attached to the house of Stuart, added her persuasions to the dictates of his own inclination, and, at the age of 19, he joined the Pretender's standard. The issue of the battle of Sheriffmuir, so unfortunate to the cause he had embraced, drove him into voluntary exile; he escaped from the conflict wounded and with difficulty, and effected a retreat to France. Here he applied himself with great diligence to the study of mathematics and military tactics, having previously made considerable progress in classical and general literature, under the auspices of the celebrated Riddiman. In 1717, he quitted Paris for Italy, whence he proceeded to Spain, in the capital of which kingdom he was fortunate enough to obtain the friendship of the duke of Liria, who procured him a command in Ormond's Irish brigade. He subsequently accompanied his patron, when appointed ambassador to Russia, where, through the duke's recommendation, he obtained the rank of lieutenant-general from the czarina, who also conferred on him the order of the black eagle. In the Russian service, he continued several years, distinguishing himself as well in the field as in the cabinet, during the wars with Turkey and Sweden. In the revolution, which ended by the elevation of the czarina Elizabeth to the throne, he also took a prominent part; but, at length, on some disgust, he obtained his dismissal. On leaving Russia, he went to Berlin, where the king of Prussia, to whom his abilities were well known, received him with open arms, and raised him to the post of governor of his metropolis, and field-marshal of his forces. He made him also his confidential companion, selecting him as his associate in a tour which he made incognito through part of the north of Europe. In the subsequent wars of that martial monarch, field-marshal Keith continued to display the greatest military talents as well as zeal in his service, till his career was finally closed by a cannon-shot, in the unfortunate battle of Hochkirchen, Oct. 14, 1758.

KELLER, John Balthasar, was born at Zurich, and studied the art of casting in metal, during the most flourishing time of Louis XIV. Keller soon distinguished himself by the boldness with which he undertook to cast the most important works. Towards the end of the 17th century, Girardon made the model of an equestrian statue of the king, 21 feet high. The statues of Marcus Aurelius, Cosmo de' Medici, Henry IV and Louis XIII had been cast in several pieces; but

Keller undertook to cast the statue of the king in one piece. The work was successful, and did as much honor to Keller as to Girardon. The king rewarded him, and gave him the direction of the foundry of the arsenal. He died in 1702. His brother, John James Keller, born 1635, was likewise a skilful founder. He died at Colmar, in 1700.

KELLERMANN, duke of Valmy, marshal and peer of France, born at Strasburg, in 1735, entered the Conflans legion as a hussar, in 1752, and performed in it the first campaigns of the seven years' war. He went through all the degrees of service, up to the rank of *maréchal de camp*. At the breaking out of the revolution, he so distinguished himself by patriotism and judgment, that the citizens of Landau, in the garrison of which he was stationed, presented him with a civic crown. At the commencement of the war, he received the command of the army of the Moselle, formed a junction, in September, with the main army under Dumouriez, and sustained, Sept. 20, 1792, the celebrated attack of the duke of Brunswick. This cannonade of Valmy, as it is called, caused the allies to retreat, and perhaps decided, not merely the whole campaign, but also the fate of Europe and the supremacy of France, till 1813. In the following wars of France, Kellermann received various general commands. Napoleon loaded him with honors, and gave him Johannisberg. After the restoration of the Bourbons, he was appointed a member of the chamber of peers, where he espoused the liberal side. He died Sept. 12, 1820, 85 years of age. In his last will, he had ordered that his heart should be buried on the field of Valmy, and his simple monument be marked by the following inscription: *Ici sont morts glorieusement les braves qui ont sauvé la France au Sept. 20, 1792. Un soldat, qui avait l'honneur de les commander dans cette mémorable journée, le maréchal Kellermann, duc de Valmy, dictant, après 28 ans, ses dernières volontés, a voulu que son cœur fût placé au milieu d'eux.* This ceremony was performed in a solemn manner, Oct. 28, 1820.

KELLGREN, Henry, a Swedish poet and *savant*, was born in 1751, in Schonen, and studied at the university of Abo. Gustavus III protected him against the assaults of envy in Stockholm, and placed him beyond the reach of want. He was one of the first members of the academy of sciences, established by the same monarch, at Stockholm. Kellgren's assiduous study

was too much for his weak frame. He died in the Swedish capital, in 1795. On his tomb-stone are the words *Poeta, philosopho, civi, amico lugentes amici*. He is considered as a poet of a very rich imagination. His complete works appeared after his death at Stockholm. As editor of the literary part of the Stockholm Journal, he labored much to improve the taste of his countrymen, and his criticisms made him many enemies.

KELP, in commerce; the ashes of sea-weeds or *fuci*. (See *Fucus*.) *F. serratus* and *F. vesiculosus*, the species used in the manufacture of this article, grow attached to rocks between high and low water mark, and are often termed *rock-weed*. On the Scottish coast, the sea-weed is cut close to the rocks, during the summer season, and afterwards spread out upon the shore to dry, care being taken to turn it occasionally, to prevent fermentation. It is then stacked for a few weeks, and sheltered from the rain, till it becomes covered with a white saline efflorescence, and is now ready for burning. This is usually accomplished in a round pit, lined with brick or stone; but the more approved form for a kiln is oblong, about two feet wide, eight to eighteen long, and from two to three deep; the bottom of this is covered with brush, upon which a little dried sea-weed is scattered, and fire is applied at one extremity; the sea-weed is now thrown on gradually, as fast as the combustion reaches the surface, and, should there be much wind, it is necessary to protect it by covering the sides with sods; after the whole is burnt, the mass gradually softens, beginning at the sides, when it should be slowly stirred up with a heated iron bar, and incorporated, till it acquires a semi-fluid consistence. This part of the process requires considerable dexterity; and, if the mass continues dry, a little common salt should be thrown on, which acts as a flux. When cold, it is broken up, and is now ready for sale.—Notwithstanding that kelp contains but two or three per cent. of carbonate of soda, while Spanish barilla often contains twenty or thirty, the manufacture of this article has increased prodigiously on the northern coasts of Great Britain and the neighboring islands. Small farms in the Orkneys, which formerly rented for £40 a year, have now risen to £300, on account of their kelp shores; and so much importance is attached to this branch of business, that, along sandy shores, stones have been placed within the flood-mark, which, in a short time, become covered with sea-weed. Many

thousand tons are thus manufactured annually, and are sold in the various ports of Great Britain, at the rate of from 7 to £10 per ton. One of the products of kelp we have not yet adverted to, is iodine. (q. v.) The uses of soda are, in general, the same with those of potash, but there are certain branches of manufactures to which it is indispensable, as to the making of plate and crown-glass, and all hard soaps. Both alkalies are consumed in immense quantities by soap-boilers, bleachers and glass-makers; but it is said that in France the use of potash has very much diminished since the culture of barilla has been introduced. New England, being the only part of the U. States which has a rocky coast, would seem to be the only part of our country fitted for the manufacture of kelp. The greater rise of the tides north of cape Cod, and especially in the more eastern parts, is also a favorable circumstance; indeed, this branch of business has been carried on in the state of Maine. On the other hand, the thousand sounds and estuaries of the more southern coast open an almost unlimited field for the culture of barilla. It is well known that the shores of the sea, and salt-marshes, as well as the margins of interior salt lakes and salines, and, in general, all places to which water holding muriate of soda in solution gains access, are inhabited by peculiar plants. Several entire genera are confined to such situations. In these maritime plants, soda replaces the potash, which is always present in those growing in ordinary situations, and it is even said that if they are removed to a distance from the sea-shore, they gradually lose their soda, and acquire potash in its stead. The barilla obtained in France from the *salicornia annua* yields 14 or 15 per cent. of soda; and that from *salsola tragus*, *S. kali*, *statice limonium*, *atriplex portulacoides*, &c., yields only from 3 to 8 per cent. The Spanish barilla is the most esteemed, particularly that from Alicante, and is obtained from the *salsola sativa*, which is carefully cultivated in light, low soils, embanked on the side next the sea, and furnished with flood-gates, through which the salt water is occasionally admitted. So anxious are the Spaniards to monopolize this trade, that the exportation of the seed is prohibited under pain of death. (See *Barilla*.) Carbonate of soda is also found abundantly in a mineral state in many countries, as in Hungary, the southern parts of Siberia, Persia, China, North Africa, and the environs of Smyrna; but the native salt has not hitherto

become important as an article of commerce.

KEMBLE, John Philip; one of the most eminent tragedians of the British stage since the days of Garrick. He was the eldest son of Roger Kemble, manager of a company of comedians at Prescott in Lancashire, in which county he was born, February, 1757, and received the rudiments of education at the Roman Catholic seminary of Sedgeley park, Staffordshire. With the view of qualifying him for one of the learned professions, he was afterwards placed by his father at the college of Douay, where he early distinguished himself by his proficiency in elocution. On his return to England, having completed his academical pursuits, he entered immediately upon the profession of an actor, for which he had long exhibited a decided predilection. At this period, he produced a tragedy on the story of Belisarius, which was acted at Liverpool, and printed a volume of Fugitive Pieces, in verse, with which he was, however, so dissatisfied, that, on the day after their publication, he destroyed every copy he could recover. Mr. Kemble appeared, for the first time in London, on the Drury-lane boards, Sept. 30, 1783, in the part of Hamlet, and was received with great applause. It was not, however, till the retirement of Smith from the stage, in 1788, that he took a decided lead in tragedy. He afterwards obtained the management of Drury-lane theatre, which he enjoyed, with only a short interruption, till 1801. In 1794, he brought out a musical entertainment of his own, entitled *Lodoiska*, which had a great run, and has since been revived with benefit to the theatre. In 1802, he visited the continent, and having passed 12 months at Paris and Madrid, returned to London, when he purchased a sixth share of Covent-garden theatre, and became manager of that establishment. Here he continued his career with great success, till the destruction of the theatre by fire in 1809. In the autumn of the same year, the present edifice, being constructed, opened with an increase of prices, which, together with certain obnoxious arrangements in regard to the private boxes, created, for a series of nights, the disturbances known by the name of the *OP riots*. Mr. Kemble took his farewell of the stage July 23, 1817, on which occasion he was complimented with a public dinner and other honorable tokens of esteem, and shortly after retired to the continent, where he died at Lausanne, in Switzerland, Feb. 26, 1823, of a paralytic attack, after a few hours' ill-

ness. As an actor, Kemble was distinguished for dignity, precision, and studious preparation. His merits were differently appreciated, but by all he was regarded as a highly gifted actor, and the impression which he made in characters more immediately adapted to his style of excellence, such as Cato, Coriolanus, Hamlet, John, Jaques, Penruddock, was very great. His management both of Drury-lane and Covent-garden theatres, but especially of the latter, was also marked by the exhibition of much refined and accurate taste, in the rectification of scenic decoration, and the adoption of appropriate costume, adding thereby both to the splendor and illusion of the drama. The learning, elegant manners and accomplishments of Mr. Kemble introduced him into the best company, by whom he was at once courted and esteemed. (See *Boaden's Life of Kemble.*)

KEMPELEN, Wolfgang, baron von, famous as the inventor of the automaton chess-player, was a native of Presburg in Hungary. He displayed much talent, when young, as a mechanic; and, as early as 1769, he announced the completion of his automaton or androides, which has since attracted so much attention. In 1783, the chess-playing figure was first exhibited at Paris; and it afterwards made its appearance in London, where it surprised and puzzled those who witnessed its performance. Baron Kempelen or his assistant was always present, to direct, by some incomprehensible method, the motions of the machine. It consists of a figure in a Turkish dress, seated at a table, the top of which is marked as a chess-board. The arm of the automaton, by means of internal machinery, is capable of executing about a dozen motions, which it appears to perform spontaneously, so as to play a game at chess with any visitor. While the movements are taking place, the noise of a fly-wheel is heard; and, after a certain time, the machinery requires winding up like a clock, before it can again be brought into action. Various conjectures have been advanced as to the means by which the action of this machine is directed. The most probable of which is, that a child or small man is concealed in a drawer under the table which supports the chess-board. It is true that the whole cavity beneath the table, as well as the body of the figure, is opened and exhibited to the spectators previously to the commencement of an exhibition; but as the inside of the automaton and the space under the table are not shown at the same

time, an individual within might move from one part to the other, so as to deceive those who witness the performance. It is easy to conceive that, by means of some audible signal, the evolutions of the automaton may be directed. This very ingenious man also constructed a speaking figure, of which he published an account in a curious work, entitled *Le Mécanisme de la Parole, suivi de la Description d'une Machine parlante, et enrichi de 27 Planches* (Vienne, 1791, 8vo.), also printed in German. He contrived, likewise, a printing-press, for the use of mademoiselle Paradies, a famous blind musician. He also published German poetry; a drama, called *Perseus and Andromeda*; the *Unknown Benefactor*, a comedy, &c. He died at Vienna in 1804. The chess-player is now in the possession of Mr. Mälzel, who has himself invented several ingenious automata, which, together with the chess-player, have been exhibited for some years past in the U. States.

KEMPIS, Thomas à. (See *Thomas à Kempis.*)

KEN, Thomas, a learned and pious dignitary of the English church, was educated at Oxford. About 1679, he went to Holland to officiate as chaplain to the princess of Orange, and afterwards to Tangier, as chaplain to the earl of Dartmouth. In every station which he held, he exhibited a conscientious propriety of conduct and unyielding morality, which procured him the respect of the licentious court of Charles II, and, strange as it may appear, conciliated the favor of that profligate prince; for, residing at Winchester when the king, attended by his female favorites, visited that city, his house was destined by his majesty's harbinger for the lodging of Nell Gwynn; but doctor Ken, thinking such an inmate unsuitable for a man of his function, positively refused to admit her. When the king was informed of his conduct, he coolly said, "Mrs. Gwynn must find lodgings elsewhere;" and, to the surprise of his courtiers, he took the first opportunity to promote this conscientious supporter of the dignity of his character. Doctor Ken became a chaplain to Charles II, in whose reign he was made bishop of Bath and Wells. He was one of the seven bishops sent to the Tower for resisting the dispensing power claimed by king James, and for petitioning in behalf of their own and the people's rights. After the revolution, bishop Ken refused to take the oath of allegiance to king William, in consequence of which he was deprived of his preferment. He

was, however, highly respected by those of opposite sentiments, and queen Anne bestowed on him a pension. He died in 1711. His works, consisting of sermons, poems, &c., were published in 4 vols., 8vo., 1721, with an account of his life.

KENAWHA, or **KENHAWA**, **GREAT**; a river in Virginia, which has its sources in the western part of North Carolina, flows through the western part of Virginia, in a north-westerly direction, and joins the Ohio at Point Pleasant, 87 miles below Marietta, and 265 below Pittsburg. It receives Green Brier river in the western part of Monroe county, and, about 40 miles below the junction, it has a remarkable cataract, falling perpendicularly 50 feet. There are salt-works on the river, a little above the town of Charlestown. The river is navigable most of the year.

KENAWHA, **LITTLE**; a river of Virginia, which runs west into the Ohio, 178 miles below Pittsburg.

KENILWORTH (called, by corruption, *Killingworth*); a town in Warwickshire, England; 5 miles N. of Warwick, 6 S. S. W. of Coventry, and 101 N. W. of London. Lon. 1° 35' W.; lat. 52° 21' N. Population, 2279. It consists chiefly of an irregular street nearly a mile in length, and has considerable manufactures of horn combs, and a market on Wednesday. The town is chiefly noted for its magnificent castle, which, along with its extensive chase and park, formed at one time the pride and ornament of this part of the kingdom. It was originally founded by Geoffrey de Clinton, chamberlain and treasurer to Henry I. Most of the buildings, of which remains are yet visible, were erected by John of Gaunt, father of Henry IV. It continued in the possession of the crown till the time of Elizabeth, who conferred it on Robert Dudley, earl of Leicester. He enlarged and adorned it at the expense of £60,000, and afterwards entertained the queen here for 17 days, in a style of extraordinary magnificence. The area within the walls of the castle contained 7 acres, and the circuit of the walls, manors, parks and chase, was 19 or 20 miles. The building was greatly injured during the civil wars; and the remains of the castle now present one of the most splendid and picturesque wrecks of castellated strength in England, and impart a melancholy grandeur to the town and neighborhood. The romance of sir Walter Scott has given it additional interest.

KENNEBEC; the largest river in Maine, after the Penobscot. It has two principal

branches—the eastern and the western. The former rises from Moose-head lake; and the latter, called *Dead river*, interlocks with the sources of the Chaudiere, with which it is connected by a portage of only five miles. The two branches unite about 20 miles below Moose-head lake, and the river afterwards pursues a southerly course. It is joined by the Androscoggin 18 miles from the sea. The tide flows up as far as Augusta, and the river is navigable for ships to Bath, 12 miles, for vessels of 150 tons to Hallowell, 40 miles, for sloops to Augusta, 2 miles farther, and for boats to Waterville, 18 miles above Augusta. There are a number of handsome and flourishing towns on the river, among which are Bath, Gardiner, Hallowell, Augusta.

KENNICOTT, doctor, and professor of theology at Oxford, born in 1718, at Totness in Devonshire, where his father was a poor shoemaker and sexton, has become known by his extensive and valuable collection of readings from about 580 manuscripts, and 12 printed editions of the Hebrew Bible, which he annexed to his edition of the Hebrew text. This work is entitled *Vet. Test. Hebr., cum variis Lectionibus* (2 vols., fol., Oxford, 1776—80). To the 2d volume is prefixed a *Diss. gener. in V. T. Hebr.* In this laborious and expensive undertaking, Mr. Kennicott was assisted by a subscription of several thousand pounds, and thus enabled to send several scholars to Spain, Italy, Germany, &c., to collate manuscripts and editions. The work has many typographical errors. The author's plan, too, was defective, and he was not sufficiently acquainted with the Eastern languages and the true principles of criticism; but he rendered great service to the cause of science and religion by opening the way in this department of biblical criticism. At the time of his death, he was employed in preparing Remarks on select Passages in the Old Testament, which were subsequently published, accompanied by eight sermons.

KENSINGTON; a large and populous village of England, in the county of Middlesex, nearly two miles from Hyde-park corner, and chiefly distinguished for its royal palace and gardens. In former times, Kensington palace was a favorite royal residence; and king William III, queen Mary, queen Anne and George II, died here. Kensington gardens, attached to the palace, are well known, and much frequented as a fashionable promenade in summer. They form a great ornament to the metropolis. These gardens contained

originally 26 acres, and 20 acres were added by queen Anne. Population, 14,428.

KENT, Edward, duke of, fourth son of George III, king of Great Britain, was born Nov. 2, 1767. He was educated in England, at Göttingen and Geneva, where he remained until 1790, when he proceeded in a military capacity to Gibraltar. He subsequently went to America, and, in 1796, became lieutenant-general, and returned to England. In 1799, he was created duke of Kent and Strathern and earl of Dublin, and the same year revisited America, but returned again in 1800. In 1802, he was made governor of Gibraltar; but his rigid discipline produced a mutiny, and he was recalled the following year. In 1818, he married the youngest daughter of the duke of Saxe-Coburg, and the widow of the prince of Leiningen. In May, 1819, the duchess bore him a daughter, who was called Alexandrina Victoria, who is now heiress presumptive of the crown. The duke of Kent died Jan. 23, 1820. His widow, with her brother, prince Leopold, the husband of the late princess Charlotte, at present assumes the principal guardianship of the infant princess, who is likely to become the future sovereign of Great Britain.

KENT, William, an ingenious artist, was born in Yorkshire, in 1685. He was apprenticed to a coach-painter, but, conscious of superior talent, repaired to London, where he was enabled, by some gentlemen, to repair to Rome, and to study painting under cavalier Luti. In this art, however, he never obtained celebrity: his talent lay chiefly in ornamental architecture, some specimens of which at Holkham, Stowe and other places, are much admired. He is regarded by Horace Walpole as the inventor of modern gardening, which he rendered more natural, graceful and pleasing. He leaped the sunk fence, says the last-mentioned writer, and saw that all nature was a garden. He broke up the old uniformity of straight lines and corresponding parts, and threw wood, water and ground, into the beautiful shapes presented by nature. The taste of Pope is supposed to have aided that of the artist. He died at Burlington-house in 1748, aged 63, and was buried at Chiswick.

KENT; a county of England, bounded north by the Thames, which separates it from Essex, east and south-east by the English channel, south by Sussex, and west by Surry; about 60 miles in length from east to west, and from 30 to 38 from

north to south; square miles, 1460. It is divided into 63 hundreds, which contain 2 cities (Canterbury and Rochester), and 24 market-towns. Its aspect is rich, diversified and beautiful; its climate mild, and its soil generally fertile.

KENTUCKY; one of the U. States, bounded north by the river Ohio, which separates it from Ohio, Indiana and Illinois, east by Virginia, south by Virginia and Tennessee, and west by the river Mississippi; lon. 81° 50' to 89° 20' W.; lat. 36° 30' to 39° 10' N.; 300 miles long, and from 40 to 180 broad; square miles, 42,000: population, in 1790, 73,677; in 1800, 220,959; in 1810, 406,511; in 1820, 564,317; and in 1830, 688,844; free white persons, 518,678; free colored persons, 4816; and slaves, 165,350. The first permanent settlement in Kentucky was begun by colonel Daniel Boone, in 1775. The country formed a part of the state of Virginia until 1790: in 1792, it was admitted into the union as an independent state. Frankfort is the seat of government. Lexington and Louisville are the largest towns. There is a penitentiary at Frankfort, in which are confined over 100 convicts. At Lexington, there is a lunatic asylum; at Danville, an asylum for the deaf and dumb; and at Louisville and Smithland on the Ohio, hospitals for sick and disabled boatmen. The most prominent literary institution is Transylvania university, at Lexington, which has about 150 students, besides the students of the law and medical schools, and of the preparatory department. There is a Roman Catholic college at Bairdstown, called St. Joseph's college; Centre college, at Danville, established by Presbyterians; and a college at Augusta, established by Methodists. There is also a Baptist college at Georgetown, and a Presbyterian college, called Cumberland college, at Princeton. The legislature has several times taken steps for establishing a system of common schools, but nothing effectual has been accomplished. There are two banks in the state, called the bank of Kentucky, and the bank of the commonwealth. There are also branches of the United States bank at Lexington and Louisville. The legislature is composed of a senate, consisting of 38 members, chosen by districts, for four years, and a house of representatives, not exceeding 100, chosen annually. The governor and lieutenant-governor are chosen by the people for four years, but are not eligible for the succeeding seven years. The legislature meets on the first Monday in November. The princi-

pal rivers of Kentucky are the Ohio, which flows along the state 637 miles, following its windings; the Mississippi, Tennessee, Cumberland, Kentucky, Green, Licking, Big Sandy, Salt and Rolling. The Cumberland mountains form the south-east boundary of this state. The eastern counties, bordering on Virginia, are mountainous and broken. A tract from 5 to 20 miles wide, along the banks of the Ohio, is hilly and broken land, interspersed with many fertile valleys. Between this strip, Green river, and the eastern counties, lies what has been called the garden of the state. This is the most populous part, and is about 150 miles long, and from 50 to 100 wide. The soil is excellent, and the surface is agreeably diversified, gently rising and descending. These lands produce black-walnut, black-cherry, honey-locust, buckeye, pawpaw, sugar-maple, mulberry, elm, ash, cottonwood, white-thorn, with an abundance of grape-vines. There is a tract of country in the south-western part of the state, east and north of Cumberland river, and watered by Green and Barren rivers, about 100 miles in extent, called the *barrens*, which, a few years since, was a beautiful prairie, destitute of timber. It is now covered with a young growth of various kinds of trees. These, however, do not prevent the growth of grass, and an almost endless variety of plants, which are in bloom during the whole of the spring and summer, when the whole region is a wilderness of the most beautiful flowers. The soil is of an excellent quality, being a mixture of clay, loam and sand. Through this country there runs a chain of conical hills, called *knobs*. It is also distinguished for some stupendous caves. Ancient fortifications and mounds of earth are found in almost all parts of Kentucky. The caves in the south-western part of the state are great curiosities. One, styled *Mammoth cave*, 130 miles from Lexington, on the road leading to Nashville, is said to be 8 or 10 miles in length, with a great number of avenues and windings. Earth strongly impregnated with nitre is found in most of these caves, and there are many establishments for manufacturing it. From 100 pounds of earth, 50 pounds of nitre have frequently been obtained. A number of the rivers in this state have excavated the earth, so as to form abrupt precipices, deep glens, and frightful gulfs. The precipices formed by Kentucky river are, in many places, awfully sublime, presenting perpendicular banks of 300 feet, of solid limestone, surmounted with a steep

and difficult ascent, four times as high. The banks of Cumberland river are less precipitous, but equally depressed below the surface of the surrounding country. —Wheat, tobacco and hemp are the staple productions. Indian corn is, however, the principal grain raised for home consumption. Rye, oats, barley, buckwheat, flax, potatoes, &c., are cultivated. Apples, pears, peaches, cherries and plums are the most common fruits. The domestic animals are large and beautiful, particularly the horse. Great numbers of swine, horned cattle, horses and mules are annually driven to the neighboring states for a market, and large quantities of pork, bacon and lard are exported. The fattening of animals is the chief mode of consuming the surplus grain, on account of the expense of conveying it to market. Considerable quantities of whiskey are made. Marble, of excellent quality, abounds, and the whole state may be said to repose on a bed of limestone. Salt and iron are among the minerals of this state. The most extensive works for the manufacture of salt established west of the Alleghany mountains, are on the waters of Kentucky. These supply not only this state, but a great part of Ohio and Tennessee. Kentucky, from its position, has become a manufacturing state. (See *United States*.)

Kentucky; a river in Kentucky, which rises in the south-east part of the state, and runs north-west into the Ohio, 77 miles above the rapids at Louisville. It is navigable, in the winter, for small boats, about 180 miles. The current is rapid, and the banks are high and rocky.

KEPLER, John, a great mathematician and astronomer, to whom astronomy is indebted for much of its present perfection, was born in 1571, at Weil, in Würtemberg, and was descended from a noble family. Poverty, and the vicissitudes of his father's fortune (who was an inn-keeper), were the causes of the neglect of his education, and of the unhappiness of his youthful days. But, in his 18th year, after the death of his father, he left the monastic school of Maulbrunn, and succeeded in entering the university of Tübingen. Here he studied the course then prescribed—first philosophy and mathematics, and then theology. At the same time, he indulged his inclination for astronomy, and devoted himself especially to the investigation of the physical causes of the motion of the celestial bodies. From Tübingen, he was invited, in 1593, to become professor of mathematics and morals at Grätz, in Stiria, where he pursued his

astronomical studies. For the sake of freedom of conscience, he fled to Hungary, but returned some time after. Meanwhile the astronomer Tycho de Brahe had come to Germany, his acquaintance with whom had an important influence on Kepler's life. He resolved to relinquish his situation, and to prepare, at Prague, with Tycho, the famous Rodolphine tables, called after the reigning emperor Rodolph, which were first printed at Ulm, in 1626, and which Lalande (*Ast.* i, p. 474) calls an *Ouvrage essentiel, et qui fut le fondement de tous les calculs de l'astronomie pendant un siècle*. At Tycho's recommendation, he was established in that place; but, as his office and science did not afford him a subsistence, he studied medicine, in order to gain a livelihood by the practice of it. The emperor had assigned him a salary, but, in the period of trouble which preceded the thirty years' war, it was not paid. Even when he was appointed imperial mathematician, by Rodolph's successor, Matthias, his hope of recovering his arrears was disappointed. Controversies with the clergy, and the disturbed state of the Austrian dominions, made his situation very uncomfortable. He left Lintz, repaired to Ratisbon, declined an invitation to England, and was confirmed by the succeeding emperor, Ferdinand, in the office of imperial mathematician, and afterwards went to Ulm, in order to print his Rodolphine tables. In 1627, he returned to Prague, and received from the emperor 6000 guilders. He finally became a professor at Rostock, on the recommendation of Albert, duke of Wallenstein, at that time duke of Mecklenberg, but did not receive the promised compensation. He therefore went to Ratisbon, where he died, in 1630. Kepler was small of stature, thin, and of a weak constitution, and short-sighted. His manners were frequently gay and sportive. He was attached to his science with the deepest love: he sought after truth with eagerness, but forgot, in the search, the maxims of worldly prudence; and there was a certain love of mystery about him, which too often manifested itself in idle astrological visions. He had but a small share of what are commonly esteemed the pleasures of life, but he endured all calamities with firmness. "Kepler," says Lalande, "is as famous in astronomy, for the sagacious application which he made of Tycho's numerous observations (he was not himself an observer), as the Danish astronomer for the collection of such vast materials." The laws of the courses of the

planets, deduced by Kepler from those observations, are known in astronomy under the name of the *three laws of Kepler* (*regulæ Kepleri*), and on them were founded Newton's subsequent discoveries, as well as the whole modern theory of the planets. The first of these laws is, that the planets do not move, as Copernicus had imagined, in circles, but in ellipses, of which the sun is in one of the foci. For this, Kepler was indebted to the observations which Tycho had made on the planet Mars, whose eccentricity is considerable, and agrees particularly with this rule, in determining which, Kepler went through an indescribably laborious analysis. (See the astronomical works of Lalande, Schubert, and others.) The second law is, that an imaginary straight line from the sun to the planets (the *radius vector*) always describes equal sectors in equal times. By this rule, Kepler calculated his tables, imagining the whole plane of revolution divided into a number of such sectors, and, from this, investigated their respective angles at the sun. This was called *Kepler's problem*. The third law teaches that, in the motion of the planets, the squares of the times of revolution are as the cubes of the mean distances from the sun; one instance of the application of which law, in the want of other means, is in the determination of the distance of the planet Herschel from the sun, it having been ascertained, that its time of revolution amounts to little more than 82 years. Kepler's services in the cause of astronomy have placed him high among the most distinguished men of science on record. In Ratisbon, a monument was erected to his memory in 1808, by Charles Theodore von Dalberg. It consists of a Doric temple, in which is placed the bust of Kepler. The most important of his works is his *Astronomia nova, seu Physica Cælestis tradita Commentariis de Motibus Stellæ Martis* (Prague, 1609, folio)—a work which secures immortality to the author, and is still regarded as classical by astronomers. An account of Kepler's life is prefixed to his Letters (printed at Leipsic, in 1718, in folio). We annex the epitaph which he composed for himself:

*Mensus eram cælos, nunc terræ metior umbras;
Mens cælestis erat, corporis umbra jacet.*

(See the article *Harmony of the Spheres*.)

KEPPEL, Augustus, an English admiral, the second son of William earl of Albemarle, entered the sea service at an early age, and accompanied admiral Anson round the world. In 1778, he was appointed to the command of the Channel

fleet. July 12, in that year, he fell in with the French fleet, under count D'Orvilliers, off Ushant, when a short but warm engagement ensued. A short delay becoming necessary to repair damages, when that labor was accomplished, the admiral made signal for his van and rear divisions to assume their proper stations. Sir Hugh Palliser, commanding the rear, took no notice of the signal, and refused to join his commander, until night prevented a renewal of the battle. The conduct of the rear-admiral being fiercely attacked, and Keppel refusing a disavowal of the charges brought against him, Palliser immediately exhibited articles of accusation against him. Keppel was honorably acquitted, and received the thanks of both houses of parliament for his services. Palliser was next tried, and reprimanded; but the public indignation was so great, that he was obliged to resign his seat in the house of commons, and to vacate several offices which he held under government. In 1782, admiral Keppel was raised to a peerage, under the title of *viscount Keppel, baron Eldon*, and was, at two different periods, appointed first lord of the admiralty. He died in October, 1786, unmarried. He was regarded as very able in his profession, and a man of great integrity and humanity.

KÉRATRY, August Hilarion, member of the French chamber of deputies, celebrated, as a writer and orator, for his spirit and liberality, was born at Rennes, 1769, of a noble family, studied at Quimper, and afterwards in his native city, where he became acquainted with general Moreau, at that time (1787—88) an instructor in the law school in that city. During the session of the constituent assembly (1789), Kératry, who had inherited a patrimonial estate in the department of Finisterre, presented a petition in favor of the equal division of estates in noble families, and the abolition of the privileges of primogeniture. During his residence in the capital, he became connected with many distinguished literary men. He was arrested, on his return home, by the terrorist Carrier, but was liberated at the request of the commune. From this time, he devoted himself to the sciences, and held many municipal offices. In 1818, he was chosen deputy of the department of Finisterre by a unanimous vote. Here he defended the fundamental principles of the revolution, although its excesses had never received his approbation. All efforts to undermine the foundations of the fundamental laws, found in him a firm

and bold opponent. It was in this spirit that he wrote his *Documens historiques; La France telle qu'on l'a faite*, and *Sur la Loi des Municipalités*. This last work, which was written (1821) in connexion with Lanjuinais, was directed against a proposition, which threatened to cut off one of the best guarantees of the rights of the people, by a limitation of the municipal privileges. As an orator in the chamber of deputies, he belonged to the moderate liberal party. Among his writings, which are political, poetical and philosophical, are his idyls and tales (after the manner of Gesner); his *Inductions morales et philosophiques*; his *Voyage de 24 Heures*; his *Habit mordoré* (a description of manners, in the spirit of Sterne); his excellent *Traité de l'Existence de Dieu*; his commentary on Kant's observations on the sublime; his work *Sur le Beau dans les Arts de l'Imitation* (Paris, 1822, 2 volumes). His works prove him to be a man of a cultivated mind, and a close thinker. His *Les derniers des Beaumanoirs, ou la Tour d'Helvin*, is a true picture of the manners and character of the "good old times" in France.

KERQUELEN TREMAREC, Yves Joseph de; an eminent French navigator, born at Brest, about 1745. He entered young into the navy, and obtained the rank of lieutenant in 1767. After being employed on an expedition to the coast of Iceland, to protect the whale fishery, he was sent, by his government, on a voyage of discovery, to the South sea. On his return, he gave a flattering account of a supposed continent towards the south pole, some points of which he had visited. He was sent, in 1773, to make farther discoveries; but the result of his researches only served to show the little value of the country he discovered; and he was arrested and confined in the castle of Saumur, after his return to France, on the charge of having ill-treated one of his officers. In his prison, he wrote several memoirs relative to maritime affairs; and, having at length obtained his liberation, he again engaged in the sea service. He died in 1797. Kerguelen published accounts of his voyage to Iceland, and likewise of his southern expeditions. His name is preserved in the appellation of an island in the southern hemisphere—Kerguelen's Land, or the Isle of Desolation.

KERKE, or KERQUE (the Flemish corruption of the German *Kirche*, the Scottish *kirk*); a church. It occurs in proper names; for instance, *Steenkerque, Dunckerque, &c.*

KERMES, in zoölogy. (See *Coccus*.)

KERMES MINERAL. (See *Antimony*.)

KERTSCH, or **KERCH**; a fortress on a peninsula of the same name, in Eastern Taurida, on the bay of Taman, with a safe harbor, important for the commerce of the Black sea and the sea of Azoph, and which Alexander ordered to be opened in 1822. Kertsch and Jenikale, not far distant from it, have a common municipal administration, and contain together 4000 inhabitants, mostly emigrant Greeks. The environs are very fertile, and produce the caper tree without cultivation. The best wine of the Crimea is also made there. Horses, Angora and Astrachan goats, black and Astrachan sheep, are raised. Considerable quantities of salt are manufactured. This new place enjoys equal privileges with Taganrock and Feodosia. (See *Caffa*.) In the neighborhood are the ruins of Panticapæum, where Mithridates the Great died, and Nymphæum. Even to this day, the highest hill near Kerch is called the *Chair of Mithridates*, and the whole peninsula Taman, where the opulent cities of Cimmeria and Phanagoria formerly flourished, contains a treasure of antiquities for future investigators.

KESSELSDORF; a village about five miles distant from Dresden, celebrated for the battle fought there Dec. 15, 1745, in which the Prussians, commanded by prince Leopold of Dessau, defeated the Saxons. (See *Frederic II.*) Near the village are considerable coal mines.

KETCH; a vessel equipped with two masts, viz. the main-mast and the mizzen-mast, and usually from 100 to 250 tons burden. Ketches are principally used as yachts for conveying princes of the blood, ambassadors, or other great personages, from one place to another. Ketches are likewise used as bomb-vessels, and are therefore furnished with all the apparatus necessary for a vigorous bombardment.—*Bomb-ketches* are built remarkably strong, as being fitted with a greater number of riders than any other vessel of war; and, indeed, this reinforcement is absolutely necessary to sustain the violent shock produced by the discharge of their mortars, which would otherwise, in a very short time, shatter them to pieces.

KETCHUP, or **CATSUP**, Mr. Todd defines as "a kind of Indian pickles imitated by pickled mushrooms." Doctor Kitchiner, in his *Apicius redivivus*, devotes 10 pages to different varieties of receipts for this sauce. There we may become acquainted with the composition and virtues of numerous catsups, whether they be

walnut, mushroom, quintessence of mushroom, quintessence of oysters, cockle, muscle, tomato, white cucumber or pudding. "Mushroom gravy," says the doctor, "approaches the flavor of meat gravy more than any other vegetable juice, and is the best substitute for it in meagre soups and *extempore gravies*." Again, "What is commonly called *catsup* is generally an injudicious composition of so many different tastes, that the flavor of the mushroom is overpowered by a farrago of garlic, shallot, anchovy, mustard, horseradish, lemon-peel, beer, wine and spices. Ready-made catsup is little better than a decoction of spice, and salt and water, with the grosser part of the mushrooms beaten up into a pulp."

KEW is situated on the Thames, about seven miles from London, and one and a half mile from Richmond. Kew palace was improved by Kent, and contains some pictures; but the gardens are the principal object of attraction. They are not very large, nor is their situation advantageous, as it is low, and commands no prospects; but they contain the finest collection of plants in the world, and are decorated with various ornamental buildings, most of which were erected by sir W. Chambers, about 1760. The first building which appears is the orangery, or green-house, 145 feet long. Near it, in a grove, is the temple of the sun, of the Corinthian order. There is also a physic garden, and, contiguous to it, the flower garden, of which the principal entrance forms one end. The two sides are enclosed with high trees, and the other end is occupied by an aviary of vast depth. From the flower garden, a short winding walk leads to the menagerie, the centre of which is occupied by a large basin of water, stocked with curious water-fowl, and enclosed by a range of cages for exotic birds. The gardens also contain the temple of Bellona, the temple of the god Pan, the temple of Eolus, the temple of Solitude, the house of Confucius, a Chinese octagon, painted with historical subjects relating to Confucius, and the Christian missions in China, near which is the engine that supplies the lake and basins in the garden with water, contrived by Mr. Smeaton (two horses raise upwards of 3600 hogsheds of water in 12 hours), the temple of victory, the great pagoda, (designed as an imitation of the Chinese Taa.) The base is a regular octagon, 49 feet in diameter; and the superstructure is likewise a regular octagon, of 10 stories, measuring, from the base to the top of the

fleuron, 163 feet. The walls are composed of very hard bricks; the outside of gray-stocks, laid with such care, that there is not the least crack or fracture in the whole structure, notwithstanding its great height. The staircase is in the centre of the building, and from the top is a very extensive view, in some directions upwards of 40 miles, over a rich and variegated country. There are also the mosque, besides a Gothic building, representing a cathedral, and the gallery of antiques, the temple of Arethusa, and a bridge from one of Palladio's designs. The ruin, which forms a passage for carriages over one of the principal walks, is built in imitation of a Roman antiquity. These gardens are opened every Sunday, from midsummer to the end of autumn.

KEY, or KEY NOTE, in music; a certain fundamental note or tone, to which the whole of a movement has a certain relation or bearing, to which all its modulations are referred and accommodated, and in which it both begins and ends. There are but two species of keys; one of the major, and one of the minor mode, all the keys in which we employ sharps or flats, being deduced from the natural keys of C major and A minor, of which they are mere transpositions.

KEYS of an organ; movable projecting levers in the front of an organ, so placed as to conveniently receive the fingers of the performer, and which, by a connected movement with the valves or pallets, admit or exclude the wind from the pipes. (See *Organ*.)

Keys, are also certain sunken rocks lying near the surface of the water, particularly in the West Indies, from the Spanish *cayo* (an islet, rock).

KEY-STONE of an arch or vault; that placed at the top or vertex of an arch, to bind the two sweeps together. This, in the Tuscan and Doric orders, is only a plain stone, projecting a little; in the Ionic, it is cut and waved somewhat like consoles; and in the Corinthian and Composite orders, it is a console, enriched with sculpture.

KEY WEST; a small island, sometimes called *Thompson's* island, belonging to the U. States, situated within the reef extending from the Tortugas islands to cape Florida, in lat. 24° 25' N.; 60 miles from cape Sable, the nearest main land of Florida, and 70 miles from the northern shore of Cuba. It is 10 miles long, and has an area of about 2000 acres. It has a good soil, which has been yet but little cultivated, and the climate has in general proved

extremely healthy. It has, however, in certain seasons, been subject to desolating fevers, which have been attributed to accidental causes. The first settlement upon it was made about the year 1820, after the cession of Florida to the U. States. It has now about 100 buildings, some of which are large and commodious, and 300 inhabitants. It has a good harbor, easy of access, and of sufficient water for vessels of the largest size. It is advantageously situated for commerce, and it is already the seat of a considerable trade with the island of Cuba. The commerce between the Atlantic coast and the islands of Cuba and Jamaica, and the ports on the gulf of Mexico, all passes near the island. It is a military post of the U. States, and is frequently visited by the ships of war on the West India station. It is the seat of the territorial court of the southern district of Florida, which has frequent jurisdiction of cases of wreckers. It has a marshal and attorney of the U. States, and a collector of the customs. The name *Key West* is said to be derived from *cayo hueco* (bone islet), a name given to this island by the Spaniards, on account of its shape.

KHALIF. (See *Caliph*.)

KHAN; the Turkish name for caravan-sary. (q. v.) We will only add, to what was said under that article, that the caravan-saries in towns are of two kinds, those for travellers and pilgrims, where a lodging is furnished gratis, and those for traders, which are usually handsomer and more convenient, and have doors to the apartments, which are well secured, but a small charge is made for each chamber, usually not more than a half-penny or a penny per day. There is also a *droit* of entry, which is more considerable, and a duty on whatever is sold in the caravan-sary. These establishments belong either to government, or to private individuals, and each is appropriated to some particular country, or to the dealers in some particular kind of merchandise.

Khan is also the name of an officer in Persia, answering to *governor* in Europe. There are *khans* of countries, provinces and cities, who have different additions to distinguish them. In the north of Asia, this title expresses the full regal dignity.

KHON; a Persian word for *bald*. It has been suggested that the name *Caucasus* may be from *khoh kasp* (bald mountain), having the summit without vegetation. This metaphor is very frequent in geographical names. *Chaumont*, in France, *Kahlenberg*, in Germany, signify the same.

KIACHTA; a town of Siberia, in the government of Irkoutsk (q. v.), on the river Kiachta, which forms the boundary between China and Russia, situated in a barren country, destitute of water and wood. Population, 4000, in 450 houses. Kiachta and the Chinese town of Maimatchin, situated opposite, on the other bank of the river, are the medium of the Russian over-land trade with China, as settled by the treaty of 1727. The duty on the trade yields an annual income of 7,000,000 roubles to Russia. The whole amount of import and export is estimated at about 30,000,000 of roubles annually. 3,000,000 pounds of tea are imported. Kiachta is 1532 versts from Peking, and 6512 from St. Petersburg. A commercial outfit and return, between Kiachta and St. Petersburg, requires generally two years. The Chinese government often interrupts the commerce, when it thinks it has any cause of complaint against Russia. China lays a duty of five per cent. on all exports and imports.

KIANG; a Chinese word signifying *river*; e. g. *Kiang-yuen* (country of rivers).

KIANGKU. (See *Yangtse*.)

KIDDERMINSTER; a market town of England, on the Saffordshire and Worcestershire canal, which was finished in 1774, and passes within 100 yards of the market-place. Kidderminster has long been noted for its manufactures. That of broadcloth prevailed in the reign of Henry VIII. But the carpet manufacture is that which has taken the firmest root here, has flourished best, and promoted most essentially the trade, wealth, and population of the town. Population, 10,709.

KIDNAPPING is the forcible and wrongful seizing upon any person, with intent to carry him away out of the country or jurisdiction within which he is seized, or to confine him, or sell him into slavery. This is a heinous offence, and was punished by fine, imprisonment and pillory, by the common law. The statute of 11 and 12 William III, c. 7, provides a punishment by imprisonment for three months, in case the captain of a merchant vessel shall, while abroad, force any person on shore, and wilfully leave him behind, or shall refuse to bring home any one whom he may have carried out, when the person shall be able and desirous to return. The laws of the U. States, also, provide that the captains of vessels shall not, unnecessarily and purposely, against the will of any sailors, leave them on shore in a foreign port. But this is not equivalent to kidnapping or

manstealing, which is applied to the forcibly seizing upon persons, with intent to sell them into slavery. This crime is punishable by the laws of every one of the U. States, though it is not made the subject of so specific provisions in all of them, as its enormity, and the temptations to committing it, in many of the states, would seem to require. It is the subject of a specific provision, in the revised code of New York (Part IV, c. 1, a. 2, 5, 28), whereby it is provided, that every person who shall, without lawful authority, forcibly seize and confine any other, or shall inveigle or kidnap any other, with intent to cause such person to be secretly confined or imprisoned in the state, against his will, or sent out of the state, against his will, or to cause such person to be sold as a slave, or in any way held to service against his will, shall, upon conviction, be punished by imprisonment not exceeding ten years.

KIDNEY; one of the abdominal viscera, consisting of two voluminous glands, the office of which is to secrete the urine from the blood. One of these glands lies on the right, and the other on the left, of the vertebral column (or back bone). They are both contained in a fatty, cellular substance (suet), and are situated behind the *peritonæum*, and before the diaphragm and the *quadratus lumborum*. They are penetrated with blood-vessels and nerves, are of a reddish color, and more consistent than the other glands. An external cellular membrane, and an internal fibrous membrane, envelope each kidney, which is divided into the cortical substance and the tubulous substance. The former constitutes the exterior part of the kidney, and extends between the cones formed by the latter. It secretes the urine, that is, separates its elements from the blood, and combines them, while the latter pours it into the pelvis, a membranous bag situated at the middle of the kidney, from which it is conveyed by the ureter, a membranous tube, into the bladder. From the bladder, the urine is evacuated by the urethra, a membranous canal passing through the penis. The kidneys are not mere filters or sieves, as was anciently supposed, and as some modern physiologists have maintained; they are true glands, that is, a vascular nervous apparatus, having a particular action for the production of a peculiar fluid. The kidneys are subject to an inflammation, called *nephritis*, and to a nervous pain, called *nephralgia*. The kidney sometimes contains stones, gravel or sand in the pelvis,

and also in the cortical and tubulous substances (see *calculus*), which occasion the most excruciating pain. Diseases of the kidneys are generally occasioned by excess in eating and drinking, particularly in subjects addicted to venery, or accustomed to violent riding, or much walking. Temperance, vegetable diet, warm bathing, abstaining from equitation, &c., are preventives.

KIDNEY BEANS. (See *French Beans*.)

KIEL; a city and fine harbor on a bay of the Baltic, in the Danish duchy of Holstein, until 1773 the chief place of the Gottorp (or Imperial Russian) part of Holstein. It contains 7000 inhabitants, and 800 houses. Lat. 54° 19' 43" N.; lon. 10° 18' 20" E. Its university was established in 1665, by Christian Albert, duke of Holstein; hence its name, *Christiana Albertina*. It has, at present, over 250 students, a library of 100,000 volumes, an observatory, and a museum of natural history. There are, also, a seminary for teachers, and other excellent institutions. The environs of Kiel are picturesque. The inhabitants are engaged in commerce. The peace of Kiel, between Denmark and Sweden, and between Denmark and Great Britain, Jan. 14, 1814, was connected with the treaties of Hanover, Feb. 8, 1814, between Denmark and Russia, and that of Berlin, Aug. 25, 1814, between Denmark and Prussia. Denmark ceded Norway to Sweden, and received in return Swedish Pomerania, with the promise of 600,000 Swedish dollars. Great Britain gave back all the Danish colonies, but retained the fleet and Heligoland. Denmark contracted to send 10,000 men against Napoleon, for which England paid £33,333 per month subsidies. Prussia ceded Saxe-Lauenburg to Denmark, and undertook to pay the 600,000 Swedish dollars already promised by Sweden, and 2,000,000 more of Prussian dollars, at certain periods, besides 3,500,000 of Prussian dollars to Sweden; in return for which she received Swedish Pomerania with Rugen. (See Schöll's *Hist. des Traités de Paix*, x, 219, seq.; xiv, 215, seq.; and xi, 144, seq.)

KIEN-LONG, emperor of China, distinguished for his love of literature, was born in 1710, and succeeded his father, Yuntschin, in 1735. He favored the Christian religion in private, but, in 1753, interdicted its exercise by a formal order; and he had previously even persecuted those who openly professed it. The missionaries were, in consequence, obliged to proceed with great caution, although several of them were in the emperor's service, and

treated with great respect as men of science and learning. On the suppression of the Jesuits, in 1774, China was less visited by scientific persons than formerly, which induced Kien-Long to send to Canton, and invite artists and learned men of all the European nations, and particularly astronomers. This sovereign possessed, on his own part, a taste for poetry and natural history. Resolving to immortalize the remembrance of his victories by the graver, he engaged French artists to copy some Chinese paintings, in which they were represented; but Louis XV had them engraved for him at his own expense. The larger Chinese collection on agriculture contains several poems of this monarch on rural occupations and incidents; and he established a library of 600,000 volumes, containing copies of all the most interesting works in China. Into this collection he admitted three books, written by the Jesuits, on the Christian religion. A description of the Chinese empire, which appeared in Busching's Magazine, was also compiled by his order. He died at Pekin, in 1786, after a reign of 50 years.

KILDA, St. Under this general name is comprised a group of islands belonging to the Hebrides. The principal island gives its name to the rest, and is about three miles long, from east to west, and two broad, from north to south, and about nine miles and a half in circumference. The islands, altogether, are supposed to be capable of pasturing 2000 sheep; but the quantity maintained scarcely amounts to one third of this. St. Kilda is about 140 miles from the nearest point of the mainland of Scotland. Population, 1692.

KILLIGREW. Three brothers of this name, distinguished by their loyalty, wit and talents, flourished under the two Charleses. They were the sons of sir Robert Killigrew.—*William*, the eldest, was born in 1605, at Hanworth, Middlesex, and, after going through the usual course of a university education at St. John's college, Oxford, made the tour of Europe. On his return to England, he obtained a place at court, as one of the gentlemen ushers of the privy chamber to Charles I. During the civil wars, he suffered materially, both in purse and person, in consequence of his adherence to the royal cause; in recompense for which he received, after the restoration, the honor of knighthood, and, on the marriage of Charles II, obtained the post of vice-chamberlain. He composed four plays—*Selindra*, the Siege of Urban, *Ormasdes*, and *Pandora* (Oxford, folio, 1666), popu-

lar in their day. His other writings are, *Midnight and Daily Thoughts*, and the *Artless Midnight Thoughts of a Gentleman at Court* (8vo.). He died in 1693.—*Thomas*, the second, was born in 1611, and died before his elder brother, in 1682. He was one of Charles I's pages, and accompanied the prince of Wales into exile. During his absence from England, he visited France, Italy and Spain, and, after the restoration, was appointed by the new king (with whom he was a great favorite), one of his grooms of the bed-chamber. A vein of lively pleasantry, combined with a certain oddity, both of person and manner, placed him high in the good graces of Charles, who would frequently allow him free access to his person, when characters of the first dignity in the state were refused it, till Killigrew, at length, became almost the inseparable companion of his monarch's familiar hours. He wrote eleven pieces for the stage, which have been collected and printed in one volume folio (1664); but we look in vain in them for traces of that facetiousness and whim, which, together with the encouragement he received from royalty, procured him the appellation of *king Charles's jester*. He lies buried in Westminster abbey.—*Henry*, the youngest of the three, was one year younger than his brother Thomas, whom he survived about six years. He was educated for the church at Christ-church, Oxford, and acted as chaplain to the cavaliers. In 1642, he graduated as doctor in divinity, and obtained a stall at Westminster. On the re-establishment of monarchy, he obtained the living of Wheathamstead, Herts, and the mastership of the Savoy. He wrote a tragedy when only 17 years old, called the *Conspiracy*. In 1652, he published a corrected version of this piece, changing the name to that of *Pallantus and Eudora*.—The females of this family were also distinguished.—*Dame Catharine Killigrew*, wife of sir Henry, was celebrated as one of the most accomplished scholars of her day. She was the daughter of sir Anthony Cooke, born about the year 1530, and, to a familiar acquaintance with the classical, as well as some of the Oriental languages, united considerable poetic talent. Her death took place in 1600.—*Anne Killigrew*, daughter of the divine already mentioned, was born in 1660. She gave strong indications of genius at an early age, and became equally eminent in poetry and painting, as well as distinguished for her piety and unblemished virtue amidst the seductions of a

licentious court. She fell a victim to the small-pox, in the summer of 1685, and has been characterized by Wood as "a grace for beauty, and a muse for wit," and celebrated by the greatest of her literary contemporaries, John Dryden.

KING (Old Frankish, *chünig*, *chunig*, *kuning*; Anglo-Saxon, *cyning*, *cyng*, *cyng*; German, *könig*; Danish, *konge*; Swedish, *konung*; Finlandish, *kuningas*) is a word of uncertain derivation. The title of *majesty* belongs exclusively to kings and emperors; other privileges, likewise, principally of a ceremonial kind, are connected with the regal title, included in diplomacy under the name of *royal honors* (*honneurs royaux*, *honores regii*). These honors, however, are sometimes enjoyed by states, where the princes do not bear the royal title; thus the late republics of Venice and of the United Netherlands (and now that of Switzerland), the electors (as the elector of Hesse), the grand-dukes, possessed them, at least in part. Previous to the French revolution, the following countries gave their princes the regal title: Germany, France, Spain, Portugal, Naples and Sicily (or the Two Sicilies), Sardinia, Prussia, Bohemia, Hungary, Galicia and Lodomeria, Poland, England, Ireland, Scotland, Sweden, Denmark and Norway. After the French revolution broke out, France was struck out from the list of kingdoms, and, soon after, Poland; and, on the other hand, while Napoleon stood at the head of France, new kingdoms arose, though some of them enjoyed only an ephemeral existence. Thus the kingdom of Hetruiria was formed from the ancient grand-duchy of Tuscany, and a new kingdom of Naples sprung into being, while the old family in the Sicilies still retained the royal dignity (not acknowledged, indeed, by Napoleon). Thus there was a kingdom of Italy, a kingdom of Holland, and, at the beginning of 1806, the kingdoms of Bavaria and Würtemberg, which were followed, in 1807, by the kingdoms of Saxony and Westphalia. The son of Napoleon was called *king of Rome*, in imitation of the custom which prevailed in the German empire, where the person elected, during the life of the emperor, to succeed at his death, was styled *king of the Romans*. The existence of Hetruiria and Holland as kingdoms, however, was soon terminated by France itself; and of Westphalia by the enfranchisement of Germany from the dominion of the French. After the fall of Napoleon, the kingdoms of the Netherlands and of Hanover were established. In place of the

kingdom of Italy, arose the Lombardo-Venetian kingdom, under the sovereignty of Austria.—In early times, the chief of an independent state was called *king*; at a later period, the pope and emperor, as spiritual and secular heads of Christendom, pretended to have the right to make kings, until Frederic III, elector of Brandenburg and duke of Prussia, declared himself king of Prussia. Like other subjects of common interest in European politics, the general acknowledgment of the royal title, in any particular instance, is dependent, to a considerable degree, on the will of the most powerful governments. The following monarchs have the titles enumerated below, in addition to those by which they are usually known. The emperor of Austria is titular king of Jerusalem, actual king of Hungary, Bohemia, the Lombardo-Venetian dominions, Dalmatia, Croatia, Slavonia, Galicia and Lodomeria; the emperor of Russia has the title of king of Moscow, Kasan, Astracan, Poland, Siberia and the Taurian Chersonesus; the king of Portugal calls himself, also, king of Algarve; the king of Spain, king of Castile, Leon, Arragon, the Two Sicilies, Jerusalem, Navarre, Granada, Toledo, Valencia, Galicia, Majorca, Seville, Sardinia, Cordova, Corsica, Murcia, Jaen, Algarve, Algeiras, Gibraltar, the Canary Islands, the East and West Indies, of the Islands and Terra Firma beyond the sea; the former kings of France called themselves, also, kings of Navarre; at present, like Louis XVI in the time of the revolution, they have the title king of the French; the king of the Two Sicilies calls himself, also, king of Jerusalem; the king of Great Britain (i. e. England and Scotland) is also king of Ireland, and the Brunswick house are kings of Hanover; the king of Denmark calls himself, also, king of the Goths and Vandals, as does, also, the king of Sweden and Norway. Where we have used the phrase "is king," we mean that the countries from which the title is derived are actually existing, distinct states, under one head, as Bohemia and Hungary, which have nothing in common, except their monarch. The same is the case with Sweden and Norway. Many of the titles are empty, antiquated designations, retained from a childish love of pomp. Down to the union of England and Ireland, the kings of England bore the title of kings of France. For information respecting the prerogatives and limitations of the king of England, see *Great Britain*, division *English Constitution*.)

KING, William; a learned Irish prelate, who was a native of Antrim, but of Scottish extraction. His zealous opposition to the measures of the Roman Catholic party, in the reign of James II, ensured his preferment after the expulsion of that prince. After holding several inferior offices, he was made, in 1702, archbishop of Dublin. He died May 8, 1729, aged 79. He was distinguished for his wit as well as his learning. Having been disappointed in his expectations of being raised to the primacy of Ireland on the death of archbishop Lindsey, it being assigned as a reason for passing him over, that he was too far advanced in years, he received doctor Boulter, the new primate, at his first visit, without paying him the customary compliment of rising to salute him, apologizing for the apparent incivility by saying, "My lord, I am sure your grace will forgive me, because you know *I am too old to rise*." Archbishop King is principally known at present as the author of a treatise *De Origine Mali*, the object of which is to show that the presence of natural and moral evil in the world is not inconsistent with the power and goodness of the Supreme Being. This work provoked the animadversions of the celebrated Bayle, as it impugned his arguments on the Manichean system. Some remarks on it were likewise published by Leibnitz, whose objections, as well as those of other opponents, are considered in the additions to an English translation of the work, by Law, afterwards bishop of Carlisle.

KING, Rufus, a distinguished American orator, statesman and diplomatist, was born in 1755, at Scarborough, in the district of Maine, where his father was an opulent merchant. He was entered at Harvard college, Cambridge, in 1773; but, in 1775, his collegiate pursuits were interrupted by the commencement of the revolutionary war, the buildings appertaining to the institution having become the barracks of the American troops. The students were, in consequence, dispersed until the autumn of the same year, when they re-assembled at Concord, where they remained until the evacuation of Boston by the British forces, in 1776. In 1777, he received his degree, and immediately afterwards entered, as a student of law, into the office of the celebrated Theophilus Parsons, at Newburyport. Before he was admitted to the bar in 1778, he volunteered his services in the enterprise conducted by general Sullivan and count d'Estaing against the British in

Rhode Island, and acted in the capacity of aid-de-camp to the former. In 1780, he began the practice of his profession, and soon after was elected representative of the town of Newburyport, in the legislature or General Court, as it is called, of Massachusetts, where his success paved the way to a seat in the old congress in 1784. His most celebrated effort in the legislature was made in that year, on the occasion of the recommendation by congress to the several states to grant to the general government a five per cent. impost, a compliance with which he advocated with great power and zeal. He was re-elected a member of congress in 1785 and 1786. In the latter year, he was sent by congress, with Mr. Monroe, to the legislature of Pennsylvania, to remonstrate against one of its proceedings. A day was appointed for them to address the legislature, on which Mr. King rose first to speak; but, before he could open his lips, he lost the command of his faculties, and, in his confusion, barely retained presence of mind enough to request Mr. Monroe to take his place. Meanwhile, he recovered his self-possession, and on rising again, after complimenting his audience by attributing his misfortune to the effect produced upon him by so august an assemblage, proceeded to deliver an elegant and masterly speech. In 1787, when the general convention met at Philadelphia for the purpose of forming a constitution for the country, Mr. King was sent to it by the legislature of Massachusetts, and, when the convention of that state was called, in order to discuss the system of government proposed, was likewise chosen a member of it by the inhabitants of Newburyport. In both assemblies, he was in favor of the present constitution. In 1788, he removed to New York city. In 1789, he was elected a member of the New York legislature, and, during its extra session, in the summer of that year, general Schuyler and himself were chosen the first senators from the state, under the constitution of the U. States. In 1794, the British treaty was made public, and, a public meeting of the citizens of New York having been called respecting it, Mr. King and general Hamilton attended to explain and defend it; but the people were in such a ferment, that they were not allowed to speak. They therefore retired, and immediately commenced the publication of a series of essays upon the subject, under the signature of Camillus, the first ten of which, relating to the permanent articles of the treaty, were written by

general Hamilton, and the remainder, relative to the commercial and maritime articles, by Mr. King. The most celebrated speech made by Mr. King, in the senate of the U. States, was in this year, concerning a petition which had been presented by some of the citizens of Pennsylvania against the right of Albert Gallatin to take a seat in the senate, to which he had been chosen by that state, on the ground of want of legal qualification, in consequence of not having been a citizen of the U. States for the requisite number of years. Mr. King spoke in support of the petition, and in answer to a speech of Aaron Burr in favor of Mr. Gallatin. Mr. Gallatin was excluded. In the spring of 1796, Mr. King was appointed, by president Washington, minister plenipotentiary to the court of St. James, having previously declined the offer of the department of state. The functions of that post he continued to discharge until 1803, when he returned home. In 1813, he was a third time sent to the senate by the legislature of New York, at a period when the nation was involved in hostilities with Great Britain. His speech on the burning of Washington by the enemy, was one of his most eloquent displays, and teemed with sentiments which had echoes from all parties. In 1816, whilst engaged with his senatorial duties at Washington, he was proposed as a candidate for the chief magistracy of the state of New York, by a convention of delegates from several of its counties. The nomination was made without his knowledge, and it was with great reluctance that he acceded to it, at the earnest solicitation of his friends. He was not, however, elected. In 1820, he was re-elected to the senate of the U. States, where he continued until the expiration of the term, in March, 1825. Several of the laws which he proposed and carried, in that interval, were of great consequence. In the famous Missouri question, he took the lead. On his withdrawal from the senate, he accepted from president Adams, the appointment of minister plenipotentiary at the court of London. During the voyage to England, his health was sensibly impaired. He remained abroad a twelvemonth, but his illness impeded the performance of his official duties, and proved fatal soon after his return home. He died like a Christian philosopher, April 29, 1827, in the 73d year of his age. The name of Mr. King is conspicuous in the annals of the American Union, in connexion, not merely with the history of

parties, but with that of the formation and establishment of the federal republican system. Politicians of every denomination bore testimony to the value of his public services, and the eminence of his talents and virtues.

KING AT ARMS, in heraldry; an officer formerly of great authority, whose business is to direct the heralds, preside at their chapters, and have the jurisdiction of armory. The origin of the title is doubtful. There are three kings at arms in England—Garter, Clarenceux, and Norroy; the first is called *principal king at arms*, the two others *provincial kings*. Clarenceux is said to be derived from Clarence, brother of Henry V, first king at arms for the south of England. Norroy (Norman French, *northern king*) is king at arms for the north of England. There are also Lion king at arms for Scotland, and Ulster king at arms for Ireland.

KING-CRAB (*limulus polyphemus*). This well known inhabitant of the northern coasts of the U. States is distinguished from its kindred species by having seven spines on the upper part of the thorax and three on the upper part of the abdomen: the superior surface of the tail is also provided with numerous spines. The female, including the tail, is about two feet in length, the male somewhat less. It should be noticed that the spines on the thorax and abdomen, although very acute and prominent when the animal is young, become more obtuse as it advances in age, so that, when full grown, they are obsolete, their situation being designated by a tubercle somewhat browner than the surrounding shell. They occur in great profusion in Delaware bay, in the inlets of the New Jersey coast, &c. These crustaceous animals never swim, but change their situations by crawling slowly along on the bottom. The feet are completely hidden by the shell. If, when cast on shore by the waves, they should unfortunately be thrown on their back, they cannot recover their proper position. Hogs are very fond of them, and it is said that these animals appear to know of the inability of the king-crab to escape if it be turned on its back, and take advantage of the circumstance by reversing as many as they can before they proceed to satisfy their appetite. When irritated, they elevate their tail, but are incapable of using it as a weapon of defence. They are never eaten by man, though the eggs are said to form an article of food in China. These are deposited by the female in a hole of considerable width, but little depth,

which she forms between high and low water mark. The eyes of this animal, according to the observations of Mr. André, consist of a great number of very small cones.

KINGFISHER (*alcedo*, Lin.). This genus of birds is distinguished by having an elongated, robust, straight, tetragonal, acute bill, with its margins finely crenate-fimbriate; feet robust; wings rather short; body thick and compact; head large and elongated; plumage thick and glossy. They occur in all parts of the world, especially in warm climates, there being but one species in Europe and one in the U. States. The kingfisher frequents the banks of rivers, and is almost always found alone, perched on a branch of a tree projecting over the water, where it remains motionless for hours, watching till some fish comes under its station, when it dives perpendicularly downwards into the water, and brings up its prey with its feet, carries it to land, where it beats it to death, and swallows it entire, afterwards casting up the scales, and other indigestible parts, in the form of balls. There is, perhaps, no animal respecting which the imagination of mankind has invented more fables than respecting this bird. The ancients supposed that it built its nest upon the ocean—

Incubot halcyone pendentibus æquore nidis. Ovid.

But, as this floating cradle would be likely to be destroyed by storms, they endowed the bird with powers to lull the raging of the waves during the period of incubation: hence those tranquil days near the solstice were termed *halcyon* days; and, that the voyager might want no accomplishment, they attributed it to the charm of song.* But these were not all the wonderful attributes of the kingfisher. Whatever branch it perched on became withered; the body, when dried, preserved clothes from the moth; and, still more extraordinary, it preserved, where it was kept, the peace of families, and was not only a safeguard against thunder, but also augmented hidden treasures. But it is not to the fanciful genius of the ancients alone, that this bird is indebted for wonderful attributes. According to Gmelin, the feathers of the kingfisher are employed by the Tartars and Ostiaks for many superstitious practices. The former pluck them, cast them into the water, and carefully preserve such as float, pretending that if with one of these feathers they

* *Cum sonat halcyones cantu, nidosque natantes
Immotæ gestat, sopitis fluctibus, unda.*

touch a woman, or even her clothes, she must fall in love with them. The Ostiaks preserve the skin about their persons as an amulet against every ill. But it is not these barbarous nations only that entertain extravagant notions in regard to this bird. It is believed by some persons, that if the body of a kingfisher be suspended by a thread, by some magnetic influence, its breast always turns to the north. The species inhabiting the U. States (*A. alcyon*) is distinguished by being of a bluish slate color, with a ferruginous band on the breast, and a spot before and behind the eyes, a large collar round the neck, and the vent white: the head has an elevated crest. It inhabits the whole continent, from Hudson's bay on the north to the equator, and perhaps even still farther south, migrating in cold and temperate regions. (See *Wils. Am. Orn.*, vol. iii, p. 59.)

KING'S ADVOCATE. (See *Advocate of the Crown.*)

KING'S BENCH. (See *Courts of Justice*, division *Courts of England.*)

KING'S COLLEGE (London). This new institution received the royal charter August 14, 1829, and was brought forward under the patronage of the government and the church. The course of education in King's college is divided into a higher and a lower department. The latter division consists of a school for the reception of day scholars, and is distinct from the higher, and intended to afford an education preparatory to it. The studies pursued are the classics, elements of mathematics, English literature and composition, and some modern languages, if desired. In the former are comprehended religion and morals, classical literature, mathematics, philosophy, logic, political economy, history, English literature and composition, foreign languages, and subjects connected with particular professions. No person, not a member of the established church, can hold any office of government or instruction in the college, except the professorships of Oriental literature and modern languages. The building forms the eastern wing of Somerset house, comprising a chapel, hall, library, lecture rooms, residences for the professors, &c. (See *Universities*, and *London University.*)—*King's college* is also the name of one of the colleges at the university of Cambridge, England. (See *Cambridge.*)

KING'S THEATRE, or ITALIAN OPERA-HOUSE, is a fashionable place of amusement in the British metropolis, Haymarket.

The performances consist of Italian operas and ballets, and the performers are the most celebrated from the Italian and French stages. The interior is very magnificent, and is nearly as large as the celebrated theatre of La Scala, at Milan. The stage, within the walls, is 60 feet long and 80 broad, and the space across from the boxes on each side, 46 feet. Each box is enclosed by curtains, according to the fashion of the Neapolitan theatres, and is furnished with six chairs. There are five tiers of boxes, all of which are private property, or are let out for the season to persons of rank and fashion. The boxes will accommodate about 900 persons, the pit 800, and the gallery 800. The opera usually opens for the season in January, and continues its performance, on Tuesdays and Saturdays, till August.

KINGSTON; a seaport on the south coast of Jamaica, constituted a city in 1802, situated on a bay or inlet of the sea, in which there is safe anchorage. It was founded in 1693, after the destruction of Port Royal by an earthquake in the preceding year. It has been of late greatly extended, and has many handsome houses. It has two churches, one Episcopal, the other Presbyterian. There is, besides, a theatre, a free-school, established in 1729, a poor-house, and a public hospital. Population—whites, 10,000; people of color, 2500; free negroes, 2500; slaves, 17,000; total, 33,000. 10 miles east of Spanish Town. Lon. 76° 33' W.; lat. 18° N.

KINGSTON, Elizabeth, duchess of, was born in 1720, and was the daughter of colonel Chudleigh, governor of Chelsea college, who, dying while she was young, left her almost unprovided for. She resided with her mother, who, through the interest of Pulteney, afterwards earl of Bath, procured her the post of maid of honor to the princess of Wales, the mother of George III. Her wit and beauty procured her many admirers, and, in spite of the levity of her manners, a serious offer of marriage from the duke of Hamilton. But while that nobleman was on the continent, Mrs. Hanmer, the aunt of miss Chudleigh, with whom she was on a visit, persuaded her niece to marry privately captain Hervey, a naval officer, afterwards earl of Bristol. She soon conceived a violent dislike of her husband, heightened by the discovery that she had been deceived into an opinion that the duke of Hamilton had forgotten her. Her marriage, which took place August 4, 1744, was kept a secret; and her refusal of ad-

vantageous proposals of marriage which she subsequently received, offended her mother, and subjected her to reproaches, which induced her to go abroad. She went in company with a major in the army, with whom she proceeded to Berlin, where they parted. She is said to have been well received by the king of Prussia, and also at the court of Dresden; and, on her return to England (as miss Chudleigh), she resumed her situation as maid of honor. Desirous of breaking off her union with captain Hervey, she adopted the infamous expedient of tearing the leaf out of the parish register, in which her marriage was entered; but, repenting of this step in consequence of her husband's succeeding to the peerage, she contrived to have the leaf replaced. Not long after, the duke of Kingston made her a matrimonial offer, on which she endeavored to procure a divorce from lord Bristol. He at first opposed her scheme; but at length he assented to it, and she obtained the wished-for separation. March 8, 1769, she was openly married to Evelyn Pierrepont, duke of Kingston, on whose death, in 1773, she found herself left mistress of a splendid fortune under the condition of her not again becoming a wife. But she did not enjoy her riches undisturbed. The heirs of the duke commenced a suit against her for bigamy, as having been divorced by an incompetent tribunal. She was tried before the house of lords, and was found guilty; but, on her pleading the privilege of peerage, the usual punishment of burning in the hand was remitted, and she was discharged on paying the fees of office. Her property had been so secured that it was not affected by this process. The remainder of her life was spent abroad, and she died at her seat near Fontainebleau, in France, Aug. 28, 1788.

KINSBERGEN, John Henry van, a Dutch admiral, born May 1, 1735, at Doesborg in Guelderland, died 1820, 84 years old. From his 9th year, he served in the army, and from the age of 14 in the navy, in which he made his way with uncommon rapidity, from the rank of a cadet to that of a vice-admiral. With the permission of the Dutch government, he entered the Russian service in 1767, at the commencement of the war against the Turks. Kinsbergen enjoyed the unlimited confidence of Catharine II, of which he proved himself worthy, by his brilliant success in an engagement on the Black sea, when, with five ships of 40 guns, and some smaller men of war, he captured the

whole Turkish fleet of 13 ships of the line. In this battle, several celebrated naval movements were first attempted by him, which have since been generally adopted. His memorial to Catharine, On the Free Navigation of the Black Sea, recommended his political talents to the notice of the empress, who loaded him with marks of esteem. Kinsbergen returned to his country in 1776, and was employed to negotiate a treaty with the emperor of Morocco, in which he was successful. On the famous day of the Dogger-bank (August 5, 1781), so honorable to the Dutch marine, Kinsbergen commanded, under admiral Zoutman, seven ships of the line, and had the principal merit of the victory over the English admiral Parker. After the peace of Paris of 1783, the empress of Russia and the king of Denmark endeavored to induce Kinsbergen to enter their respective marines; but he refused every offer. During the war of the French revolution, he was of great assistance to his country, particularly in the campaigns of 1793 and 1794. After the unsuccessful campaign of 1795, and the change of administration, Kinsbergen remained in retirement, declining the most brilliant offers. Even Schimmelpenninck, his personal friend, could not tempt him from his retreat, where he occupied himself in study, agricultural pursuits, and the education of the lower classes. King Louis Napoleon appointed him first chamberlain, count of Doggerbank, counsellor of state, and gave him the grand cross of the order of the union. But he could not induce him to leave his country-seat in Guelderland, in the neighborhood of Appeldoorn, nor to accept any of the salaries which were connected with these appointments. After the union of Holland with France, in 1810, Napoleon also endeavored to gain him over, and appointed him senator. Kinsbergen could not refuse the dignity, but he declined the income connected with it. Master of a large fortune, he applied it to benevolent and useful institutions. Few men have left a name equally deserving esteem. He was a member of many orders, and a member and correspondent of the principal learned societies. As a writer on navigation and tactics, he is an authority. His maps, including those of the Crimea, are excellent.

KIOSK; a summer-house, with a tent-shaped roof, open on all sides, and isolated. It is supported by pillars (commonly placed in a square), round the foot of which is a balustrade. It is built of wood, straw, or

similar materials, and is chiefly erected to afford a free prospect in the shade, but it also serves to embellish a rural or garden view. The word *kiosk* is Turkish. This kind of pavilion has been introduced from the Turks and Persians into the English, French and German gardens.

KIPPIS, Andrew, a dissenting divine, was born at Nottingham, March 28, 1725; in 1746, became minister of a dissenting congregation at Boston in Lincolnshire, and, in 1753, pastor to a dissenting congregation in Westminster. In 1763, he was appointed classical and philological tutor to the academy supported in London by the funds of William Coward. In 1767, he received the degree of doctor of divinity from the university of Edinburgh, and, in 1778 and 1779, became a fellow of the society of antiquaries and of the royal society. He died in 1795. Doctor Kippis laid the foundation of the New Annual Register. He devoted his principal attention during the later years of his life, to an improved edition of the *Biographia Britannica*. This work was conducted on a plan so elaborate, that no termination of it on the same scale is likely to be attempted. The labors of doctor Kippis extended only to five folio volumes, forming a small part of the plan.

KIRCHE; a German word for *church*, which appears in a great number of geographical words.

KIRCHER, Athanasius; a learned German Jesuit, born at Fulda, in 1602. He was professor of mathematics, philosophy, and the Oriental languages, at Würzburg, when the arms of the Swedes disturbed his repose, and he repaired to Avignon, where he continued several years. He wished to return to Germany, but the pope called him to Rome, where he at first taught mathematics in the *collegium Romanum*, and afterwards occupied himself in the study of the Egyptian hieroglyphics. Father Kircher was a good Orientalist, as well as an excellent mathematician; but the fanciful nature of some of his studies has caused most of his productions to be considered rather curious than useful. In his attempts to unravel the hieroglyphics, he occasionally fell into some singular absurdities. His industry as a writer was unwearied, the whole of his works occupying no fewer than 20 volumes in folio, 11 in quarto, and 3 in octavo. Among these are his *Œdipus Ægyptiacus* (4 vols., fol., 1652—55), which contains fanciful explanations of a great number of hieroglyphics. In this work, and in his *Prodromus Coptus* (Rome, 1636, 4to.), and his

Lingua Ægyptiaca restituta (Rome, 1644, 4to.), he made investigations respecting the Coptic language. He wrote also *Obeliscus Ægyptiacus*; *Phonurgia Nova*; *Ars magna sciendi seu Combinatoria*; *Pralusiones Magneticae* (folio); *Itinerarium extaticum* (4to.); *Mundus subterraneus* (2 vols.); *Musurgia universalis* (2 vols., folio); *Turris Babel*; *China illustrata*; *Primitiæ Gnomonica catoptrica* (4to.); *Arca Noë*; *Polygraphia* (folio); *Organum Mathematicum*; *Ars magna Lucis et Umbrae* (folio), &c., &c. In his *Musurgia*, he lays claim to the invention of the Æolian harp; and in his *Phonurgia Nova*, to that of the speaking-trumpet. He was afterwards professor of Hebrew and mathematics at Rome, where he died in 1680. His writings embrace the departments of philosophy, mathematics, physics, mechanics, cosmography, natural history, philology, history and antiquity. They exhibit great learning, but are disfigured by many extravagances.

KIRGHISES, or KIRGUI, or KIRGESE, or KIRGUSES, or, as they call themselves, SARA-KAISAKI (Cossacks of the steppes); a widely extended people of Independent Tartary, occupying a great part of the southern frontier of Asiatic Russia. They are generally considered as the descendants of the most ancient Mongols, who formerly dwelt in the neighborhood of the Chinese wall. When they were first discovered, at the time of the Russian conquest of Siberia, they were dwelling on the upper Yenesej. Since that time, they have been known as a restless and dangerous people. They now inhabit the wastes between the Ural and the Irtysh, called, by the Russians, the *Kirghise steppes*. These wastes are bounded west by the Caspian sea and the province of Caucasia, north by the governments of Ufa and Tobolsk, and east by that of Kolivan. They have been long divided into the Great, the Middle and the Little Hordes. The first, on account of their valor and the inaccessible mountains in which they dwell, long remained independent, until their sultan, in 1819, acknowledged the sovereignty of Russia. The Middle and Little Hordes have recognised the dominion of the Russians since 1731, but have always shown themselves faithless, and disposed to pillage; on which account, lines of small fortresses have been erected along the streams on their frontiers. The Little Horde occupy the westernmost position, and wander over the plains south and east of the Ural, and between the Caspian and Aral. The Middle Horde live farther east,

on the vast plains north of lake Aral. These two hordes subsist entirely on their flocks, and have no agriculture. The Great Horde live farther to the east and south, beyond the Aral, and on the Sirr; some of them are pastoral, but a considerable proportion cultivate the land, and inhabit fertile, mild and well watered countries. In the lofty ranges between Cashgar and Siberia, there is a race called *Wild* or *Mountain Kirghises*, free, fierce and warlike, amounting to about 50,000. There is another detachment south of Cashgar, an agricultural people, and more civilized than the rest. The Little and Middle Hordes are said to consist each of about 30,000 tents or families, each of about 10 persons; total, about 600,000. Their constitution is entirely free and independent. The khan of the Little Horde is indeed appointed by Russia, but he has scarcely any influence. The Russian government, instead of exacting any tribute, pay regular pensions to all the principal chiefs, in consideration that these turbulent warriors shall not exercise upon the Russian empire those predatory habits for which they have always been famous. The Kirghises profess the Mohammedan religion, practise polygamy, and live in tents of felt, superior to those of the Calmucs. Their articles of trade are cattle, furs, leather, and coverlets of felt.

KIRWAN, Richard, a distinguished modern writer on chemistry, geology, and the kindred sciences. He was a native of the county of Galway, in Ireland, and was educated at the university of Dublin, where he took the degree of LL. D. He devoted himself with great ardor to chemical and mineralogical researches, and became a member of the royal Irish academy, and also a fellow of the royal society. He published in the *Philosophical Transactions* for 1781, 1782 and 1783, *Experiments and Observations on the Specific Gravities and Attractive Powers of various Saline Substances*; which important subject he farther prosecuted in the *Philosophical Transactions* for 1785. In 1784 appeared his *Elements of Mineralogy* (2 vols., 8vo.), which was translated into German by Crell, and subsequently republished, with additions and improvements. In 1787, he published an *Essay on Phlogiston and the Constitution of Acids*, designed as a defence of the theory of chemistry advanced by doctor Priestley. This very ingenious production was translated into French by the advocates for the anti-phlogistic hypothesis, and published,

with animadversions on the rival system, which made a convert of doctor Kirwan, whose rejection of the principles he had so ably supported, had a considerable influence in producing the revolution which took place in chemical science. He produced, besides the foregoing works, an *Estimate of the Temperature of different Latitudes* (1787, 8vo.); a treatise on the *Analysis of Mineral Waters* (8vo.), and another on *Logic* (2 vols., 8vo.), to which may be added various communications to the learned societies to which he belonged. At Dublin, he founded an association for the express purpose of cultivating mineralogy; and, as a geologist, he advocated what has been called the *Neptunian theory* of the earth, in opposition to that of doctor James Hutton. His death occurred in 1812.

KIRWAN, Walter Blake; an Irish divine, eminent for his popularity as a preacher. He was born at Galway, in 1754, and educated at the English Catholic college of St. Omer's, whence he removed to Louvain, where he took priest's orders, and became professor of philosophy. In 1778, he was appointed chaplain to the Neapolitan embassy in London, and attained some fame by his exertions in the pulpit. In 1787, he resolved to conform to the establishment, and preached to his first Protestant congregation in St. Peter's church, Dublin. In 1788, he was preferred to the prebendary of Howth, and to the rectory of St. Nicholas, Dublin, and finally presented to the deanery of Killala. Wonders are told of his attraction as a preacher, and it was often necessary to keep off the crowds from the churches in which he preached, by guards and palisadoes. He died exhausted by his labors, Oct. 27, 1805, leaving a widow with two sons and two daughters, to the first and last of whom was granted a pension of £300 per annum. In 1814, a volume of his sermons was published, which is the only work of his which reached the press.

KISS. The mutual touching of the lips and the mingling of the breath is one of the most natural expressions of affection among men. The child expresses its love by a kiss, and men in all stages of refinement do the same. Inferior creatures express tenderness in a similar manner, as the billing of doves; and many creatures touch objects of love with the mouth, or rather tongue. The faithful dog cannot show his affection to his master more clearly than by licking his hand. But man puts the restraints of reason and decorum on the demonstrations of affec-

tion, and the kiss has been subjected to various restrictions among different nations; so that, to this day, a kiss given contrary to the will of the person kissed, may, in Germany, be punished as an *injuria* (q. v.), whilst, on the other hand, it has entered largely into various ceremonies, civil and religious. Kissing the forehead of a person, is a sign of condescension and good will, the parental blessing being sealed with the father's kiss on the forehead of the child among many nations. Kissing the shoulders, is an expression of inferiority; still more so kissing the hand or the foot; and the sign of the greatest humiliation among the Poles, Bohemians, Russians and Asiatics, is to kiss the ground, as a symbol that the place where the foot of the honored person has trod is dear to them. The word *kissing* is the usual expression, in Hebrew, to signify adoration; and *adoratio* literally means *touching with the mouth*. In the article *Adoration*, mention has been made of the custom of kissing the hand, among the ancients, and of kissing the foot, originally of every bishop, and, at present, of the pope. The stern Romans held it indecent for a husband to kiss his wife in presence even of a daughter. With some nations, as the Germans and French, it is customary for men to kiss each other after a long absence, &c. In the most ancient times, it was customary to impress kisses on one's own hand, and then make the sign of throwing them to the sun, moon, the stars (*Job*, xxxi, 26), and even to Baal. Homer makes Priam kiss the hand of Achilles. Among the Romans, the higher magistrates gave their hands to be kissed by the lower officers, and, under the emperors, the monarch gave his hand to be kissed to the superior officers, whilst the lower officers paid their homage on their knees, touching the gown of the emperor, or their own hand, &c. Kissing the hand of the sovereign, now forms part of the ceremonial of all European courts. It is considered a particular mark of grace. Officers are allowed this privilege when they set out on important expeditions, or return from them. In Prussia alone, the king's hand is never, or, at least, very rarely kissed, as a matter of settled ceremonial. In Spain, the grandees perform this ceremony on certain court days. In England, it is customary for certain officers to kiss the king's hand, at their first audience. When the emperor of Russia dies, his body is laid out in state, and every one who approaches him kisses his hand.

Catholics kiss the bishop's hand, or rather the ring which he wears in virtue of his episcopal office. Kissing the hand was formerly very customary on the European continent, and still is so to a certain degree. A gentleman may kiss a lady's hand; and people of the lower class, to express great gratitude, will not unfrequently kiss the hand of a benefactor. In Russia, all persons have a right to kiss each other on Easter day—the day of rejoicing in the Greek Catholic church. When the wives of European monarchs appear, people generally make a motion as if to kiss the gown, and they offer the hand to be kissed. In England, on the first presentation of young ladies of high families at court, the queen salutes them on the cheek. In the same way, she salutes a hostess if she pays a visit. Kissing the foot is a common Oriental sign of respect. The later Roman emperors, whose court ceremonial was mixed with so many servile customs, first introduced this practice into the West. The popes have required it as a sign of respect from the secular power since the eighth century. Pope Constantine I first had his foot kissed by the emperor Justinian II, on his entry into Constantinople, in 710. Valentine I, about 827, required every one to kiss his foot; and, from that time, this mark of reverence appears to have been expected by all popes. When this ceremony takes place, the pope wears a slipper with a cross, which is kissed. In French, this is called *le baiseinent des pieds*, the word *baiseinent* is not used in any other relation. In more recent times, Protestants have not been obliged to kiss the pope's foot, but merely to bend the knee slightly. Even Catholic princes sometimes perform only the genuflexion. When the pope is elected, he is placed on the altar, and the cardinals, first of all, perform the adoration. Each approaches the newly elected pope, and kisses his foot, then his knee, and is then embraced by the pope, and saluted on the cheek. The clergyman sometimes kisses the woman immediately after marriage. The *kiss of peace*, in the Catholic church, forms part of a religious rite. St. Peter and Paul end their epistles—"Salute one another with a holy kiss." And it was at first customary among the Christians to give each other the kiss of peace—a symbol of concord and unity—particularly at the *agapes*. (q. v.) Many fathers of the church mention it, as St. Justin, Tertullian, St. Cyril, &c., and in the apostolic constitutions and all old liturgies, mention is made of it. The heathens, on this ac-

count, reproached the Christians with licentiousness, as, from misunderstanding, they also accused them of sacrificing human victims, when the sacrifice of Christ was meant. That these kisses may have had an objectionable tendency, we do not deny, as we know ourselves, that, in Berlin, where a certain sect had reintroduced these kisses with the agapes, government found it necessary to prohibit them. In the Greek church, the kiss of peace is given before the oblation, and after having dismissed the catechumens. In the Latin church, the kiss of peace is given immediately before the communion. The clergyman who celebrates mass kisses the altar, and embraces the deacon, saying, *Pax tibi, frater, et ecclesie sanctae Dei*; the deacon does the same to the sub-deacon, and says, *Pax tecum*; the latter salutes the other clergy. Kissing must have been common with the Jews, since Judas used it as a sign to betray the Savior.

KITCHINER, doctor, was the son of a Middlesex justice, who was for many years a coal merchant in the Strand. He acquired a handsome fortune, which he bequeathed to his son. Doctor Kitchiner was educated at Eton, after which he settled in London as a physician. Early in life, he married; but a separation from his wife soon after took place by mutual consent, and he was left at liberty to employ his ample fortune in experimental cookery. He treated eating and drinking as the only serious business of life; and, having caught the attention of the public by the singularity of his conduct, he proceeded to promulgate, under the title of the Cook's Oracle, the laws of the culinary art, professedly founded on his own practice. He was accustomed to assemble his friends at a *conversazione* at his house on Tuesday evenings, and, for the regulation of these meetings, placed a placard over his chimney piece, containing these words, "At seven come, at eleven go." He was a great stickler for punctuality, and kept a slate in his hall, on which his hours for receiving visitors were indicated. His appearance, his dress, his usages, his person, were all quaint. Besides his Cook's Oracle, doctor Kitchiner wrote Practical Observations on Telescopes (1815, reprinted for the fourth time in 1825, under the title of Economy of the Eyes); *Apicius redivivus*, (1817); the Art of Invigorating and Prolonging Life (1822); also the Traveller's Oracle, published just after his death; &c. In his private character, doctor Kitchiner is represented as having been an amiable man, respected

for his integrity, conciliatory manners, and social virtues.

KLAPROTH, Martin Henry, one of the most scientific German philosophers and chemists, was born Dec. 1, 1743, at Wernigerode, and died Jan. 1, 1817, at Berlin. He was an apothecary till the year 1788. In that year, he became chemist to the academy of sciences, and sold his apothecary's establishment. He was the first who discovered, in the stone called *zircon*, and also, afterwards, in the hyacinth, from Ceylon, a peculiar alkaline earth, to which he gave the name of *zircon earth*, and which has since attracted much attention from the French chemists Morveau and Vauquelin. In 1797, he ascertained, by a masterly analysis, the existence of a distinct metal in the substance called *platina*, to which he gave the name *tellurium*. To the same period belongs, also, the discovery of another species of metal, the titanium, which is of frequent occurrence in combination with the oxide of iron and various earths. We are indebted to his analysis of pitch blende for a third new species with which he enriched the class of metals—the uranium. He subjected meteoric stones to a very thorough and careful analysis, and proved the interesting point of their identity of composition. The results of these, and other more important chemical investigations, are exhibited in his Contributions to the Chemical Knowledge of Mineral Bodies (Berlin, 1795—1815, tom. vi.) We have also a chemical dictionary published by him in conjunction with D. Wolff, of which five volumes, and four supplementary volumes, have appeared at Berlin, since 1807, which may be regarded as the most complete and respectable chemical work, in alphabetical arrangement, that Germany has produced.

KLAPROTH, Henry Julius von, royal Prussian professor of the Asiatic languages, born at Berlin, Oct. 11, 1783, is a son of the celebrated chemist. He devoted himself, from his youth, to the study of the Asiatic languages, particularly the Chinese, had access to the libraries at Berlin and Dresden, published at Weimar, in 1802, the Asiatic Magazine, and was invited to Petersburg, as adjunct to the academy, in the department of the Asiatic languages. His inquiries were particularly directed to the history and geography of the interior of Asia, the migrations of its different races, and the connexions of their languages. In 1805, he accompanied count Golowkin, who went as ambassador to Peking; but the expedition was obliged to

return after reaching the frontier. He then occupied himself in collecting vocabularies, and, at Irkutsk, had an opportunity of becoming acquainted with the Mantchoo tongue. After his return, the academy of Petersburg, on the recommendation of count John Potocki, employed him to pursue, in the region of Caucasus, his inquiries into the Asiatic races. He there discovered the descendants of the Huns, the Avars and Alans, and returned to Petersburg in 1809, with many important manuscripts, which he had collected. His Archives of Asiatic Literature (tom. i. 1810—14) were the result of this journey. He then drew up the catalogue of the Chinese and Mantchoo books and manuscripts in the library of the academy, the Chinese characters for which were cut at Berlin. In 1812, he took his dismissal, went, in 1814, to Italy, and fixed upon Paris, at last, as his permanent residence; where, with the assistance of the king of Prussia, who appointed him professor of the Asiatic languages, he published several works, as the Supplement to the Chinese Dictionary of Father Basil of Glemona (by De Guignes, 1813), No. 1. The continuation of it was rendered unnecessary by the publication of that of Morrison (Macao, 1820, tom. ii. 4to.). He also published a catalogue of the Chinese and Mantchoo books and manuscripts in the royal library at Berlin (Paris, 1822), with extracts and chronological tables for the Chinese history; then a treatise upon the Oigurs, the first that contained specimens of the language of this ancient people, in the Oigur characters. In 1823 appeared, at Paris, his *Asia Polyglotta* (4to.), with an Atlas of Languages, in folio, in which he indicated the ramifications of the various Asiatic races, according to the relation of their languages, and ascertained the date of the commencement of certain history among the various Asiatic nations. This work also contains a translation of a Mongol legend of the life of Buddha, with remarks. In 1823, he published a translation, in French, of his *Travels in the Caucasus*, with many additions, in 2 volumes. He is also quite active in the service of the Asiatic society of Paris. The journal of that institution contains many papers by him. He also published, at the expense of this society, a Georgian grammar, and Georgian and Mantchoo dictionaries. Since 1824, have appeared his *Historical Tables of Asia, from the Monarchy of Cyrus to our Time* (4 vols., 4to., with an atlas, in folio). Klaproth is also

a member of the Asiatic society in London, and some time since undertook to publish there a *Geographical, Statistical and Historical Description of China* (2 vols., 4to.).

KLÉBER, Jean Baptiste, a French general, distinguished not less for his humanity and integrity, than for his courage, activity and coolness, was one of the ablest soldiers which the revolution, so fertile in military genius, produced. His father was a common laborer, and young Kléber was himself peacefully occupied as an architect, when the revolutionary troubles led him to the career of arms. He was born at Strasburg, in 1754, and had received some education in the military academy at Munich, through the agency of some German gentlemen, to whom he had rendered a service. From 1776 to 1783, he had served in the Austrian army against the Turks. Having entered a French volunteer corps as a simple grenadier in 1792, his talents soon procured him notice; and, after the capture of Mayence, he was made general of brigade. Although he openly expressed his horror at the atrocious policy of the revolutionary government, his services were too valuable to be lost, and he distinguished himself as a general of division, in the campaigns of 1795 and 1796. In 1797, Kléber, dissatisfied with the directory, retired from the service; but general Bonaparte prevailed upon him to join the expedition to Egypt. Although no favorite of the general in chief, yet, such were the talents that he displayed in the campaign in Syria, and the battle of Aboukir, and such was the esteem in which he was held by the army, that Bonaparte left him the command, when he himself returned to France. His situation was difficult; the army was weakened by a series of laborious marches and sanguinary conflicts, and all communication with France was intercepted; yet he maintained himself successfully against the enemy, and introduced order into the government; but, in the midst of new preparations for securing possession of the country, he was assassinated by a Turkish fanatic, June 14, 1800.

KLEIN; a German word for *small*, prefixed to a great many geographical names.

KLEIST VON NOLLENDORF, Emilius Frederic, count, one of the most distinguished Prussian generals in the campaign of 1813 and 1814, against Napoleon, was born at Berlin, in 1762, served in the campaign of 1778, and rose by his cour-

age and military talents, so that, in 1803, he was made reporting adjutant-general to the king of Prussia. After the enterprise of Schill (q. v.), he was made commandant of Berlin—a post which required, at that time, much talent and skill. In 1812, Kleist commanded a corps of Prussians, auxiliary to Napoleon's grand army. He distinguished himself in the battle of Bautzen (q. v.), May 20, 1813, and was one of the plenipotentiaries who concluded the armistice. When Napoleon forced the allies to retreat from Dresden into Bohemia, after the battle of Dresden (August 26), Kleist followed the general retreat; but Vandamme had entered Bohemia before him, with 40,000 men, and Kleist had only the alternative of surrendering his army, or fighting for life and death. He took the bold resolution of throwing himself down from the mountains into the rear of Vandamme (August 30), and was victorious at the village of Nollendorf. His success saved Bohemia, against which Napoleon had directed his masterly demonstrations. Kleist was afterwards known by the affix of *Nollendorf*. Feb. 14, 1814, he was victorious at Joinvillers, in France. In the engagement at Claye, March 29, he led a brigade to an assault in person. Kleist died in 1821.

KLEIST, Ewald Christian von, born March, 1715, at Zeblin, in Pomerania, studied for nine years at the Jesuit college at Kron, in Great Poland, then at the gymnasium at Dantzic, and went, in 1731, to Königsberg to study law. Besides his acquisitions in mathematics, philosophy, literature and law, he made great proficiency in modern languages. Having tried in vain, several times, to obtain a civil appointment, he entered the army, and became, in 1736, a Danish officer. He studied, with zeal, the military art, and, when Frederic the Great, of Prussia, began his reign, Kleist entered his service. He always disliked the military profession, which, together with an unfortunate attachment, gave to his poems the tone of melancholy which distinguishes them. Few German poems, from an author without previous reputation, have met with such immediate success, as his *Frühling* (Spring), which was first printed in 1749, for his acquaintance only. In 1757, Kleist was made major. In 1759, he lost his leg in the battle of Kunnersdorf: he lay, during the whole night, with his wounds exposed, on the field of battle. The next noon, he discovered himself to a Russian officer, who was passing by, and who had him carried to Frankfort.

Eleven days after the battle, the fractured bones parted, and tore an artery, and he died—August 24. Kleist was an amiable and upright man. He composed several war-songs, and liked to call himself a Prussian grenadier. His admiration of Frederic the Great was deep, as many of his most beautiful compositions prove. Kleist enjoyed the friendship of many of the most talented men of his nation.

KLEPHTES, (κλέφτης, κλεπτης), properly a robber, is the name given to those Greeks who kept themselves free from the Turkish yoke, in the mountains, and carried on a perpetual war against the oppressors of their country, considering every thing belonging to a Turk lawful prize, often, as may be easily imagined, exercising their profession on Greeks. Such a population is very common in conquered countries, where there are mountains to afford a retreat to the vanquished. At the time of the conquest of Greece, many inhabitants of the plain retreated to the highlands, where they even formed κλεφτοχωρία (klephtes villages), from whence they surprised and annoyed the Turks. By degrees, their independence was acknowledged by the Turks (as, for instance, in the case of the Mainots), and a militia acknowledged by the Turks was formed among them, which, under the pachas and other officers of the Porte, was intrusted with the maintenance of order in different parts of Greece. The members of this were called ἀρματοῦλοι and ἀρματοῦλοι (probably from the Latin and Italian word *arma*, as many words of this description have become incorporated in the modern Greek, partly through the conquest of the country by the Romans, partly by the predominance of Italian on the Mediterranean in later periods; or from ἄρμα, which is connected with the ancient Greek ἄρμυρον). The leaders were called *capitani* (q. v.), and their dignity appears to have been hereditary. These *armatoloi*, also called *pallikaris*, from the ancient πάλλαιξ or πάλληξ, returned to their profession of klephtes, when their rights were attacked; as, for instance, when Ali Pacha of Janina attacked the Albanians. They retained a proud feeling of independence, and Greece would never have been freed, had it not been for these robbers, who were the first to take part in the struggle against the Porte in 1821, and furnished the few good soldiers in the land-service of Greece, their leaders becoming the best generals in the Greek service, as Niketas, Colocotroni, &c. (See *Greece*.) Whole tribes are to be counted among the klephtes; as the

Sulioti and Chimarioti, in the ancient Epirus, and the Sphakioti on the island of Crete. Besides these, there were single klephtes in the Morea, &c. (For their mode of attack, see Hobhouse's *Journey through Albania*, 1817.) The songs of the klephtes, composed among themselves, form part of the modern national Greek poetry, of which Fauriel (*Chants populaires de la Grèce moderne*, 2 vols., Paris, 1824 and 1825) has published several. The same work gives, in a *discours préliminaire*, interesting details respecting the klephtes and armatoloi. The klephtes are hospitable towards those who are not tempting objects of plunder, as the writer can testify.

KLINGEMANN, Augustus; doctor of philosophy and director of the national theatre at Brunswick; born Aug. 31, 1777, at Brunswick. Inspired by the example of Göthe and Schiller, who had raised the theatre of Weimar to a high degree of perfection, he devoted himself entirely to the theatre of his native place. In 1813, this was raised from a private to a national institution. Klingemann received the direction of it, and, under his superintendence, it became one of the first of the German theatres. Of his dramatic productions, *Heinrich der Löwe*, *Luther*, *Moses*, *Faust*, *Deutsche Treue*, are stock pieces. His *Dramatische Werke* were published at Brunswick, 1817—18, 12 volumes.

KLINGER, Frederic Maximilian von, was born at Frankfort on the Maine, in 1753. He fell, when young, into an exaggerated style of writing, but even then produced a great sensation. Few works have stirred the passions more than his *Twins* (*Twillinge*). Göthe speaks favorably of his exterior, his disposition and his manners. What Klinger was, he became through himself. Rousseau was a favorite author of his. After having studied at the gymnasium of Frankfort, he went to the university of Giessen. His first productions were dramatic. In the war of the Bavarian succession, he entered the military service, and was made a lieutenant in the Austrian army. After the peace, he went (1780) to St. Petersburg, and was appointed an officer and reader to the grand-admiral, the grand-prince Paul, with whom he afterwards travelled through Poland, Austria, Italy, France, Switzerland, Germany, &c. In 1784, he was appointed an officer of the military school at St. Petersburg, and rose, in the reign of Catharine, to the rank of colonel. In 1799, he was made major-general by the emperor Paul, and director of the corps of cadets.

He distinguished himself by an independent uprightness, at a time when the vagaries of Paul made such conduct dangerous. When Alexander ascended the throne, he received several other offices, as the direction of the university of Dorpat, the inspection of the body of pages, &c. After having received many orders, and the income of a crown village for life, he was made lieutenant-general in 1811. He had served 40 years, when he retired. He died in Feb., 1831. In the midst of his many occupations, Klinger was ever alive in the field of poetry. His works are quite peculiar. He collected them in 12 volumes (Königsberg, 1809 to 1810). *Der Weltmann und der Dichter* is considered by many the best of his productions.

KLOOTZ, Anacharsis. (See *Clootz*.)

KLOPSTOCK, Frederic Gottlieb, one of the most celebrated of the German poets, was born July 2, 1724, at Quedlinburg. His father, a senator of Quedlinburg, and an eccentric man, removed, after his birth, to Friedeburg, near Wettin, on the Saal, where the young Klopstock spent his childhood, and was subsequently placed at the gymnasium of Quedlinburg. At the age of 16, he went to the *Schulpforte*, near Naumburg. Here he made himself perfect in the ancient languages, acquired a decided predilection for the classical writers, and formed the resolution of writing a great epic poem, though he was not determined what subject to choose; and the reign of Henry the Fowler at that time attracted him most. In 1745, he studied theology at Jena, and commenced, in solitude, the first canto of his *Messiah*. In Leipsic, where he went the next year, he formed an acquaintance with Cramer, Schlegel, Rabener, Zacharia, and others, who then published the *Bremischen Beiträge*, in which the three first cantos of the *Messiah* appeared, in 1748, and excited universal attention. Some revered the author as a sacred poet; others, particularly the old divines, imagined that religion was profaned by his fictions. A country clergyman came to him, and seriously entreated him, "for the sake of God and religion, not to make Abaddon (a fallen angel) blessed." He likewise underwent some severe criticism, on account of the novelty and originality of the form and spirit of his poem. The work made the deepest impression in Switzerland. In the summer of 1750, he went to Zurich, where much exertion was made to induce him to remain. The people there viewed him with a kind of veneration. He trav-

elled for his amusement through several cantons. In Denmark, too, the three first cantos of his Messiah met with a very favorable reception; and Klopstock was invited by the minister Bernstorff to Copenhagen, with a small pension, to finish the poem. He departed in 1751, and travelled through Brunswick and Hamburg, where he became acquainted with a young lady, who was a great admirer of his poems—the talented Meta (properly *Margaretha*) Moller, the daughter of a merchant there. In Copenhagen, he was received with every mark of kindness and esteem. There he passed the winter, and was introduced, the next summer, by his friend Moltke, to king Frederic V; and, as the king was to go to Holstein in the summer of 1752, Klopstock took advantage of the opportunity to go to Hamburg, and visit Meta. He spent the whole summer there, and returned again with the king to Denmark. In the summer of 1754, he went back to Hamburg, and was married to Meta. The steps by which his acquaintance with this lady ripened into tenderness, are described with great beauty and simplicity in his well-known letters, written when she had become his wife, to Samuel Richardson, and afterwards published in that writer's correspondence. But he soon lost her. She died in child-bed, in 1758. He buried her in the village of Ottensen, near Hamburg, and placed over her remains this simple and beautiful epitaph:

*Saat gesæet von Gott,
Am Tage der Garben zu reifen.
(Seed sown by God,
To ripen for the harvest.)*

From 1759 to 1763, he resided alternately at Brunswick, Quedlinburg and Blankenburg, and afterwards in Copenhagen. In 1764, he wrote his *Hermann's Schlacht* (Battle of Arminius), and sent it to the emperor Joseph, but not with the success which, in his patriotic enthusiasm, he had promised himself. After this, he entered upon his investigations of the German language. In 1771, after Bernstorff had received his discharge, he left Copenhagen for Hamburg, under the character of Danish secretary of legation and counsellor of the margraviate of Baden. In Hamburg, he finished his Messiah. In 1792, he married a second time. His principal amusement in winter was skating; and he was once in imminent danger of losing his life by it. Klopstock died with calmness and resignation, without pain or a groan, March 14, 1803. His body was buried with great pomp and solemnity, in the

presence of thousands. Purity and noble feeling were the characteristics of his mind. He was gay and animated; but his sportiveness was always tempered with a sort of dignity, and his satires were ever gentle. His disposition restrained him from intimacy with men of rank; for he hated the chilling condescensions of the great more than an open insult. He loved to retire into the country, with the families of his friends, and was always pleased to be among children. In the private welfare and happiness of his friends, he took the deepest interest; but dearest of all to him was the memory of his poetical brethren, with whom he had been associated in Leipsic, and whom he saw, one after another, dropping into the grave. (See Henry Döring's *Life of Klopstock*, Weimar, 1825.) As a lyrical writer, Klopstock is, perhaps, among the most successful of any age. He may well be called the Pindar of modern poetry; but he is superior to him in richness and deep feeling, as the spiritual world which he paints excels, in intrinsic magnificence, the subjects celebrated by the Grecian poet. His religious odes, as the Festival of Spring, exhibit the elevation of the psalmist. The elegiac odes to Fanny and Ebert are known to every refined reader, for the melancholy and elevated tone which reigns throughout them. In expressing joyful feelings, as in the ode to the lake of Zürich, and when his strains are almost Anacreontic, as in many small pieces to Cidli, he never oversteps the limits of Platonic love. His patriotism is strong and ardent, and his latter odes, called forth by the French revolution, in which, at first, he took the warmest interest, and those in which he speaks of the German language and poetry, are distinguished by bold and original turns of expression. Owing to these, and to his frequent allusions to the northern mythology, he is often obscure to many readers; but the most illiterate cannot fail clearly to understand and gratefully to venerate Klopstock as a writer of sacred poetry. He gained, however, the brightest and quickest fame by his epopee; the first cantos of which, by their prophetic grandeur and the magnificence of their description, their genuine patriarchal tone, and unfeigned sincerity of love and devotion, announced him a rival of Milton. His *Bardiete* are dramatized epics, and lyrical scenes for the theatre, rather than tragedies. The choruses possess the highest lyrical beauty, and breathe the most ardent patriotism and independence of feeling.

He has idealized the German character as no other one has ever done. Klopstock created for the Germans a new, strong, free and genuine poetic language, and essentially influenced the form, by introducing the ancient classic measures, and especially the hexameter; but he was unduly prejudiced against rhyme. He acquired much reputation by his grammatical works. His fragments on Language and the Art of Poetry, his Republic of Letters, and his Conversations on Grammar, explain many difficulties in German grammar and German poetry, although his innovations in orthography, and, on the whole, several peculiarities of his style, cannot meet with general approbation. Klopstock's works were published at Leipsic, 1798—1817, 12 volumes, 4to. They have lately appeared in a pocket edition. The 100th anniversary of his birth was celebrated at Quedlinburg and Altona, July 2, 1824, and a monument has been erected to him in Quedlinburg.

KLOTZ, Christian Adolphus, was born Nov. 23, 1738, at Bischofswerda, in Lusatia. He studied at Jena, and, in 1762, was appointed professor of philosophy in Göttingen. His patron, Quintus Julius, recommended him to Frederic the Great, and he went, in 1765, to Halle. The king esteemed him as an eminent scholar. Klotz distinguished himself chiefly by his Latin poems, his numismatic treatises, his works on the study of antiquity, and on the value and mode of using ancient gems. After having contributed much to the *Deutsche Bibliothek*, under the signature E, he established a paper in opposition to it, called *Acta Literaria*. Lessing was the acutest and wittiest of his opponents. His disputes with Lessing and Burmann took a tone of undue violence. Klotz was of an ardent temperament. Thorough in Greek and Latin, of modern languages he knew little. An irregular life hastened his death. He died Dec. 31, 1771.

KNEE; a crooked piece of timber, having two branches or arms, and generally used to connect the beams of a ship with her sides or timbers. The branches of the knees form an angle of greater or smaller extent, according to the mutual situation of the pieces which they are designed to unite. One branch is securely bolted to one of the deck-beams, and the other in the same manner strongly attached to a corresponding timber in the ship's side. By connecting the beams and timbers into one compact frame, they contribute greatly to the strength and solidity

of the ship, and enable her to resist the effects of a turbulent sea. In fixing these pieces, it is occasionally necessary to give an oblique direction to the vertical or side branch, in order to avoid the range of an adjacent gun-port, or because the knee may be so shaped as to require this disposition, it being sometimes difficult to procure so great a variety of knees as may be necessary in the construction of a number of ships of war. The scarcity of these pieces frequently obliges shipwrights to form their knees of iron.

KNEES, in Russia; noblemen of the first class, who, however, have no more authority over their vassals than other landholders. A number of these nobles are descended from the former ruling families of particular provinces of the Russian empire. Of such families, there are 18, as the Dolgorucky, Repnin, Scherbatow, Wazneskoy, Labanow, who are all descended from the family of Rurik. The czar allows them to retain the arms of the provinces which their forefathers ruled. Individuals of these families have been illustrious in the civil and military service of their country. There are also some nobles of this class sprung from collateral branches of the family of Jagellons, which formerly ruled in Lithuania or Poland, and is extinct in its principal line. There are others, who claim a descent from independent Tartar khans. The last class of Knees consists of the descendants of noble members of Tartar tribes, who, after the subjugation of the tribes, embraced the Christian religion, and received the above title from the Russian sovereigns.

KNELLER, sir Godfrey, an eminent portrait painter, born at Lubeck about 1648, was designed for a military life, and sent to Leyden to study mathematics and fortification, but, showing a decided bent for painting, was placed under Bol and Rembrandt at Amsterdam. He visited Italy in 1672, where he became a disciple of Carlo Maratti and Bernini, and painted several historical pieces and portraits both at Rome and Venice. On his return, he was induced to visit England, in 1674; and, having painted a much admired family picture, which was seen by the duke of York, the latter introduced the painter to Charles II, by whom he was much patronised. He was equally favored by James II and William III, for the latter of whom he painted the beauties at Hampton court, and several of the portraits in the gallery of admirals. He also took the portrait of the czar Peter for

the same sovereign, who, in 1692, knighted him, and made him gentleman of the privy chamber. Queen Anne continued him in the same office, and George I made him a baronet. He continued to practise his art to an advanced age, and had reached his 75th year at his death, in 1723. His interment took place in Westminster abbey, under a splendid monument erected by Rysbrach, on which appears an epitaph by Pope. The airs of his heads are graceful, and his coloring is lively, true and harmonious; his drawing correct, and his disposition judicious. He displays a singular want of imagination in his pictures, the attitudes, action and drapery being insipid, unvarying, and ungraceful. (See Walpole's *Anecdotes of Painting*.)

KNIEPHAUSEN, a lordship on the Jade, in the duchy of Holstein-Oldenburg, containing about 32 square miles, and 2900 inhabitants, has belonged, since 1757, to the counts of Bentinck; was formerly a sovereign state, but was attached, in 1807, to the department of East Friesland, in Holland; in 1810, to the department of Eastern Ems, in France; and was sequestered, in 1813, on account of the lord having taken part with the allies. Subsequently, it was occupied by Oldenburg, which deprived the lord of his sovereignty, but left him in possession of the revenue, &c. In this condition he has been obliged to remain, as the German diet would not recognise him as an independent prince. The name *Kniephausen* is derived from a castle, to which belong eight houses with 50 inhabitants, and in which the chancery, archives, &c., of this Lilliputian government are kept. At the congress of Aix-la-Chapelle, the lord of Kniephausen appeared, and gave rise to much ridicule, by assuming the airs of an independent prince.

KNIGGE, Adolphus Francis Frederic Louis, baron de, was born Oct. 16, 1752, at Brendenbeck, not far from Hanover. His father died in 1766, leaving him an estate deeply embarrassed. In 1769, he went to the university of Göttingen. In 1777, he was made a chamberlain at Weimar. He died at Bremen, May 6, 1796, after a rather unsettled life. Knigge wrote a variety of works. His novels were once very popular, on account of their easy style of narration, and a tinge of satire and popular philosophy. His *Journey to Brunswick* was, for a considerable time, much read. The work which gave him the greatest reputation was his *Ueber den Umgang mit Menschen* (On Intercourse

with Men)—a book which contains some good advice, but is disfigured by a minuteness of petty precepts. Knigge was also a member of the illuminati, and thus became implicated in some of the disputes relating to that order. (See *Short's Biography of the Baron Adolphus von Knigge*, Hanover, 1825.)

KNIGHT, Richard Payne; a patron of learning and the fine arts, to the study and encouragement of which he devoted a great portion of his time and ample fortune. His father, from a dread lest his son's constitution should be impaired by the discipline of a public school, kept him at home till his 14th year; but, on his decease, young Knight was placed at a large seminary, where he soon distinguished himself by his progress in classical literature, his favorite study. His splendid collection of ancient bronzes, medals, pictures and drawings in his museum at his house in Soho square, gave equal proofs of his taste and liberality. This collection he bequeathed, at his death, to the British museum. His principal writings are, *Remains of the Worship of Priapus*, lately existing in Naples, and its Connexion with the Mystic Theology of the Ancients (4to., 1786); an *Analytical Essay on the Greek Alphabet* (4to., 1791); *Analytical Inquiry into the Principles of Taste* (8vo., 1805); and *Prolegomena in Homerum*, reprinted in the *Classical Journal*. He was also author of some poems. He died in 1824, aged 76.

KNIGHT, in chess. The move of this piece has given rise to an interesting problem, in regard to the various modes by which the chess-board may be covered by the knight. The path of the knight over the board is of two kinds, terminable and interminable. It is interminable whenever the concluding move of a series is made in a square, which lies within reach by the knight of that from which he originally set out, and is terminable in every other instance. Euler, in the *Memoirs of the Academy of Berlin*, for 1759, has given a method of filling up all the squares setting out from one of the corners. He has likewise given an interminable route, and has explained the method by which the routes may be varied, so as to end upon any square. Solutions of the same problem have also been given by Montmort, Demoivre and Mairan.

KNIGHTHOOD. (See *Chivalry*.)

KNIGHTS OF ST. JOHN. (See *John, Knights of St.*)

KNIGHTS OF THE SHIRE, or **KNIGHTS OF PARLIAMENT**, in the British polity, are two

knights, or gentlemen of estate, who are elected on the king's writ, by the freeholders of every county, to represent them in parliament. The qualification of the knight of the shire is, to be possessed of £600 per annum in a freehold estate.

KNIGHTS TEMPLARS. (See *Templars*.)

KNIPHAUSEN. (See *Kniephausen*.)

KNIVES. (See *Cullery*.)

KNOLLES, Richard, author of a History of the Turks, was entered at the university of Oxford about 1560, and became a fellow of Lincoln college, which he left to be master of the free school of Sandwich, in Kent. He composed his History of the Turks (folio, 1610), being the labor of 12 years. It has passed through several editions, and is executed in a manner which has transmitted his name with honor to posterity. Several continuations have appeared, the last of which is that of sir Paul Rycaut. Knolles is also author of the lives and conquests of the Ottoman kings and emperors until 1610, and a Brief Discourse on the Greatness of the Turkish Empire. He translated Bodin's Six Books of a Commonwealth.

KNOUT; the severest punishment in Russia. The criminal, standing erect, and bound to two stakes, receives the lashes, which are inflicted with a leather strap, in the point of which wire is interwoven, on the bare back. Almost every lash is followed by a stream of blood. From 100 to 120 lashes are the highest number inflicted, and are considered equal to the punishment of death. If the criminal survives, he is exiled for life into Siberia. Formerly, the nose was slit up, and the ears cut off, in addition, and a W (*wor*, rogue) cut in the skin of the forehead, and made indelible by rubbing in gunpowder. At present, the two former punishments, at least, are abolished. If the criminal is sentenced to a smaller number of lashes, the last part of the punishment is not inflicted, and he is sent to Siberia for a few years only.

KNOX, John, the chief promoter of the reformation in Scotland, was descended from an ancient family, and born at Gifford, in East Lothian, in 1505. He received his education at the university of St. Andrews, where he took the degree of master of arts much before the usual age. Having embraced the ecclesiastical profession, he began, as usual, with the study of scholastic divinity, in which he so much distinguished himself, that he was admitted into priest's orders before the time appointed by the canons. He soon became weary of the theology

of the schools, and resolved to apply himself to that which was more plain and practical. This alteration of opinion led him to attend the sermons of Thomas Guillaume, or Williams, a friar of eminence, who was so bold as to preach against the pope's authority; and he was still more impressed by the instructions of the celebrated George Wishart, so that he relinquished all thoughts of officiating in the church of Rome, and became tutor to the sons of the lairds of Long Niddrie and Ormiston, who had embraced the reformed doctrines. Here he preached, not only to his pupils, but to the people of the neighborhood, until interrupted by cardinal Beaton, archbishop of St. Andrews, who obliged him to conceal himself; and he thought of retiring to Germany. The persuasion of the fathers of his pupils, and the assassination of Beaton by the Leslies, encouraged him to remain. He took shelter, under the protection of the latter, in the castle of St. Andrews, where, notwithstanding the opposition of the clergy of St. Andrews, he preached the principles of the reformation with extraordinary boldness, until the castle of St. Andrews surrendered to the French in July, 1547, when he was carried with the garrison into France, and remained a prisoner on board the galleys until the latter end of 1549. Being then set at liberty, he passed over to England, and, arriving in London, was licensed either by Cranmer or the protector Somerset, and appointed preacher, first at Berwick, and afterwards at Newcastle. In 1552, he was appointed chaplain to Edward VI, and preached before the king, at Westminster, who recommended Cranmer to give him the living of All-hallows, in London, which Knox declined, not choosing to conform to the English liturgy. It is said that he refused a bishopric, regarding all prelacy as savoring of the kingdom of antichrist. He, however, continued his practice as an itinerary preacher, until the accession of Mary, in 1554, when he quitted England, and sought refuge at Geneva, where he had not long resided before he was invited, by the English congregation of refugees at Frankfort, to become their minister. He unwillingly accepted this invitation, at the request of John Calvin, and continued his services until embroiled in a dispute with doctor Cox, afterwards bishop of Ely, who strenuously contended for the liturgy of king Edward. Knox, in his usual style of bold vituperation, having, in a treatise published in England, called the

emperor of Germany as great an enemy to Christ as Nero, his opponents accused him to the senate of treason, both against the emperor and queen Mary; on which he received private notice of his danger, and again retired to Geneva, whence, after a residence of a few months, he ventured, in 1555, to pay a visit to his native country. Finding the professors of the Protestant religion greatly increased in number, and formed into a society under the inspection of regular teachers, he finally joined them, and produced so great an effect by his exertions, both in Edinburgh and other places, that the Roman Catholic clergy, alarmed at his progress, summoned him to appear before them in the church of the Blackfriars, in that metropolis, May 15, 1556. This summons he purposed to obey, resting on the support of a formidable party of nobles and gentry, which so alarmed his opponents, that they dropped the prosecution. Thus encouraged, he continued preaching with additional energy and boldness, and was even induced to write to the queen regent, Mary of Lorraine, a letter, in which he earnestly exhorted her to listen to the Protestant doctrines. While thus occupied, he was strongly urged to pay a visit to the English congregation at Geneva; and he accordingly departed for that place in July, 1556. He was no sooner gone, than the bishops summoned him to appear before them; and, as that was impossible, they passed sentence of death against him as a heretic, and burnt him in effigy at the cross at Edinburgh. Against this sentence he drew up an energetic appeal, which was printed at Geneva, in 1558, previously to which, he was invited to return to Scotland, and had actually reached Dieppe on his way, when he received other letters recommending delay; which epistles he answered by such strong remonstrances against timidity and backsliding, that those to whom he addressed them entered into a solemn bond or covenant, dated December 3, 1557, "that they would follow forth their purpose, and commit themselves, and whatever God had given them, into his hands, rather than suffer idolatry to reign, and the subjects to be defrauded of the only food of their souls." Knox, in the mean time, had returned to Geneva, where he published his treatise entitled the *First Blast of the Trumpet* against the monstrous Regimen of Women, chiefly aimed at the cruel government of queen Mary of England, and at the attempt of the queen regent of Scotland to rule

without a parliament. A *Second Blast* was to have followed; but the accession of queen Elizabeth to the throne of England, who was expected to be friendly to the Protestant cause, prevented it. In April, 1559, he would have visited England, but was prevented by the resentment felt by Elizabeth at his late treatise. He therefore proceeded directly to Scotland, where he found a persecution of the Protestants just ready to commence at Stirling. He hurried to the scene of action to share the danger, and, mounting a pulpit, inflamed the people by a vehement harangue against idolatry. The indiscretion of a priest, who, immediately on the conclusion of this discourse, was preparing to celebrate mass, precipitated his hearers into a general attack on the churches of the city, in which the altars were overturned, the pictures destroyed, the images broken, and the monasteries almost levelled to the ground. These proceedings were censured by the reformed preachers, and by the leaders of the party. From this time, Knox continued to promote the reformation by every means in his power, and, by his correspondence with the secretary Cecil, was chiefly instrumental in establishing the negotiation between the congregation and the English, which terminated in the march of an English army into Scotland. Being joined by almost all the chief men of the country, these forces soon obliged the French troops, who had been the principal support of the regent, to quit the kingdom; and the parliament was restored to its former independence. Of that body, the majority had embraced Protestant opinions, and no opportunity was omitted of assailing the ancient religion, until at length the Presbyterian plan, recommended by Knox and his brethren, was finally sanctioned, the old ecclesiastical courts being abolished, and the exercise of religious worship, according to the rites of the Roman church, prohibited. In August, 1561, the unfortunate Mary, then widow of Francis II, king of France, arrived in Scotland to reign in her own right. She immediately set up a mass in the royal chapel, which, being much frequented, excited the zeal of Knox, who was equally intolerant with the leaders of the conquered party; and, in the face of an order of privy council, allowing the private mass, he openly declared from the pulpit, "that one mass was more frightful to him than 10,000 armed enemies, landed in any part of the realm." This freedom gave great offence,

and the queen had long and angry conferences with him on that and other occasions, in which he never paid the slightest homage either to sex or rank. He preached with equal openness against the marriage of Mary with a Papist; and Darnley, after his union, being induced to hear him, he observed, in the course of his sermon, that "God set over them, for their offences and ingratitude, boys and women." In the year 1567, he preached a sermon at the coronation of James VI, when Mary had been dethroned, and Murray appointed regent. In 1572, he was greatly offended with a convention of ministers at Leith, for permitting the titles of *archbishop* and *bishop* to remain during the king's minority, although he approved of the regulations adopted in reference to their elections. At this time, his constitution was quite broken, and he received an additional shock by the news of the massacre of St. Bartholomew. He had, however, strength enough to preach against it, which he desired the French ambassador might be acquainted with, but soon after took to his bed, and died November 24, 1572. He was interred at Edinburgh, several lords attending, and particularly the earl of Morton, that day chosen regent, who, when he was laid in his grave, exclaimed, "There lies he who never feared the face of man, who hath been often threatened with dag and dagger, but yet hath ended his days in peace and honor; for he had God's providence watching over him in an especial manner when his life was sought." The character of this eminent reformer has been sketched by doctor Robertson, in his History of Scotland, who, in observing upon the severity of his deportment, impetuosity of temper, and zealous intolerance, observes, that the qualities which now render him less amiable, fitted him to advance the reformation among a fierce people, and enabled him to encounter dangers, and surmount opposition, to which a more gentle spirit would have yielded. John Knox was a man of exalted principles, great intellectual energy, undaunted intrepidity, and exemplary piety and morality. He was twice married, and had two sons by his first wife. His writings, in addition to those already mentioned, are, a Faithful Admonition to the Professors of the Gospel of Christ in the Kingdom of England (1554); a Letter to Queen Mary, Regent of Scotland; a Steady Exhortation to England for the speedy embracing of Christ's Gospel. After his death appeared his History of

the Reformation of Religion within the Realm of Scotland, to the fourth edition of which (Edinburgh, 1732, folio) are appended all his other works. (See M'Crie's *Life of Knox*.)

KNOX, Vicesimus, D. D.; an eminent divine, author of a variety of works, both in theology and polite literature. He was born December 8, 1752, and educated at Oxford. On the death of his father, he was chosen his successor in the head-mastership of Tunbridge grammar school, over which he presided 33 years, till, retiring in 1812, he was himself, in turn, succeeded by his son. His works, many of which have been translated into various European languages, are, *Essays, moral and literary* (three volumes, 8vo. and 12mo.); *Liberal Education* (two volumes, 8vo. and 12mo.); *Winter Evenings* (three volumes, 8vo. and 12mo.); *Personal Nobility, or Letters to a young Nobleman* (one volume, 12mo.); *Christian Philosophy* (two volumes, 12mo.); *Considerations on the Nature and Efficacy of the Lord's Supper* (one volume, 8vo.), and a pamphlet *On the national Importance of classical Education*, with a variety of sermons on different occasions; expurgated editions of *Horace* and *Juvenal*, and a series of selections from the works of the best English authors, generally known as *Elegant Extracts*, and *Elegant Epistles*. Doctor Knox wrote the Latin language with great purity and elegance, both in prose and verse. He died September 6, 1821.

KNOX, Henry, a major-general in the army of the U. States, was born at Boston, July 25, 1750, and received the best education which the schools of his native town could afford. He commenced business, as a bookseller, when quite young, but relinquished it on the breaking out of the revolutionary war, in order to devote his energies to the cause of his country. He had previously, at the age of 18, been chosen one of the officers of a company of grenadiers, and evinced a fondness and ability for the military profession. At the battle of Bunker hill, he served as a volunteer, and was constantly exposed to danger in reconnoitring the movements of the enemy. He soon afterwards undertook the perilous and arduous task of procuring from the Canadian frontier some pieces of ordnance, the American army being entirely destitute of artillery—an enterprise which he successfully accomplished. He received the most flattering testimonials of approbation from the commander-in-chief and congress,

and was intrusted with the command of the artillery department, with the rank of brigadier-general, in which he remained until the termination of the war. Throughout the whole contest he was actively engaged, principally near the commander-in-chief, whose confidence he eminently enjoyed. In the battles of Trenton and Princeton, Germantown and Monmouth, he displayed peculiar skill and bravery, and subsequently contributed greatly to the capture of Cornwallis at Yorktown. Immediately after this event, he was created a major-general by congress, at the recommendation of Washington. The capture of that place having put a period to the war, he was named one of the commissioners to adjust the terms of peace—a duty which was satisfactorily performed. He was deputed to receive the surrender of the city of New York, and shortly afterwards was appointed to the command at West Point, where he had to execute the delicate and difficult task of disbanding the army, and inducing a soldiery, disposed to turbulence by their privations and sufferings, to resume quietly the character of citizens. In March, 1785, he was appointed by congress to succeed general Lincoln in the secretariship of war, and in this office he was continued by president Washington after the adoption of the present constitution of the U. States. His duties were subsequently much increased, when he received charge of the navy department; and America is greatly indebted to his efforts for the creation of our naval power. For 11 years, the functions of the war office were discharged by general Knox. At the end of that period, in 1794, he obtained a reluctant consent from Washington to retire, in order that he might adequately provide for his family, the salary attached to his office being insufficient for that purpose. He then settled in the District of Maine, where he possessed a large tract of land, in the right of his wife; but he did not abandon entirely public life, being repeatedly induced to become a member both of the house of representatives and of the council of the state. In 1798, when our relations with France wore a hostile aspect, he was called upon, amongst others, to command in our army; but the peaceful turn which affairs took allowed him soon to return to his retirement. He died Oct. 25, 1806, at his seat in Thomaston, Maine, at the age of 56. His death was caused by internal inflammation, the consequence of swallowing the bone of a chicken. General

Knox was as amiable in private as he was eminent in public life. His social and domestic qualities were of a kind to render him warmly beloved and admired by all who possessed his affection and friendship. His imagination was ardent, and his understanding sound, and he had improved his mind greatly by study. His integrity was unimpeachable, and his courage and perseverance were unsurpassed.

KOBOLD, in Germany; a spirit which differs from the spectre in never having been a living human creature. It corresponds to the English *goblin*. The kobold is connected with a house, or a family, and appears in bodily shape. Though inclined to mischievous teasing, they do, on the whole, more good than evil to men, except when irritated. In the mines, they are thought to appear, sometimes in the shape of a blue flame, sometimes in that of a dwarfish child, and to indicate rich veins. They do the miners mischief when disturbed by them.

KOCH, Christopher William, professor of law at Strasburg, and a writer well versed in the history of the middle ages, born 1737, at Buxweiler, in Alsace, conducted the school for teaching public law in Strasburg with such success, that scholars flocked thither from the most distant countries. In 1761, Koch published his *Commentatio de Collatione Dignitatum et Beneficiorum ecclesiasticorum in Imperio Germanico*, and, in 1789, his Commentary upon the Pragmatic Sanction. In Paris, he collected (1762) materials for the continuation of the *Historia Zaeringo-Badensis*, which appeared under the name of Schoepflin, who, however, had only composed the first volume. In 1780, Joseph II conferred upon Koch the rank of nobleman. He remained a professor in Strasburg, until the university was broken up. In 1789, he was sent as deputy to Paris, by the Protestants in Alsace, in order to obtain the acknowledgment of their civil and religious freedom, which was effected by the decree of the 17th August, 1790. After the breaking out of the revolution, he was sent, by the department of the Lower Rhine, as deputy to the legislative assembly, where he showed himself a friend to constitutional monarchy. The anarchists threw him into prison, from which he was not delivered till after 11 months' confinement, and the overthrow of Robespierre. In 1802, he was appointed a member of the tribunate, in which capacity he did much for the restoration of order in church affairs, and the

re-establishment of the Protestant university in Strasburg. After the dissolution of the tribunate, Koch refused to fill any other office; but the government granted him, without any solicitation on his part, a salary of 3000 francs, and, in 1810, the title of rector in the university at Strasburg. He died Oct. 25, 1813. Besides the above-named works, he is the author of the following: *Tables généalogiques des maisons souveraines de l'Europe* (Strasburg, 1782—1784); *Hist. abrégée des Traités de Paix depuis la Paix de Westphalie* (Basil, 1791, 4 vols.; continued by Schöll, Paris, 1818, 15 vols.); *Tableau des Révolutions de l'Europe depuis le Bouleversement de l'Empire Romain en Occident* (Basil, 1802, Paris, 1814 et seq., 4 vols.); and *Table des Traités entre la France et les Puissances étrangères depuis la Paix de Westphalie*; with a new collection of diplomatic documents (Basil, 1802). Koch was a man of great acuteness, equanimity, patience, and nobleness of character.

KOENIG; German for *king*; prefixed to many geographical names, as, *Königsberg* (king's mountain).

KOH; an Indo-Germanic word, signifying *mountain*; e. g. *Hindookoh* (mountains of India).

KOLA; a seaport of Russia, the chief town in Russian Lapland (now called the circle of Kola), in Archangelskoe; 540 miles N. Petersburg; lon. 33° 0' E.; lat. 68° 32' N.; houses, 50; churches, 2. It is situated near the North sea, on the river Kola, which forms a bay at its mouth, where is a considerable fishery for whales, sea-dogs, and other fish, which the inhabitants cure for sale. The circle, including the whole of Russian Lapland, is very dreary and thinly peopled, supposed to contain not more than 2000 inhabitants.

KOLBERG. (See *Colberg*.)

KOLIN. (See *Colin*.)

KOLLER, baron of; Austrian field-marshal-lieutenant; one of the commissioners who accompanied Napoleon, in 1814, to Elba, after his abdication. Koller had to protect Napoleon against a rabble infuriated by priests and ultras, and always preserved the great coat of Napoleon, who had put on his (Koller's) uniform, in order to be less exposed to danger. When Koller returned from Elba, he fulfilled Napoleon's wish to conclude a treaty of commerce between Genoa and Elba. The conduct of Koller is highly praiseworthy, if we consider how much the passions of men were excited against Napoleon, and how much a liberal treatment of him was misconstrued. General Koller afterwards

served with the Austrian army in Naples. He died Aug. 23, 1826. He left an excellent collection of antiques.

KOM, or **COM**, or **KOOM** (ancient *Chosna*); a town of Persia, in Irak; 150 miles N. Ispahan; lon. 51° 14' E.; lat. 34° 20' N.; population, about 15,000. It is said to have contained, formerly, 15,000 houses, but is now much reduced, and exhibits extensive ruins. It is esteemed by the Persians a holy city, and has a celebrated mosque, and an asylum for debtors, who are protected and supported. One of the mosques is highly esteemed by the Persians, because of the sepulchres of Shah Sophy and his son Shah Abbas II, and that of Sidy Fatima, grand-daughter of Mohammed. These tombs are frequented by pilgrims from all parts of Persia, who resort hither once a year to pay their devotions. Kom is celebrated for manufacturing the best sabres and poniards of all Persia. The walls of the town are lofty, and it has seven gates. The grand bazar crosses the town from one gate to the other; besides which, there are others well furnished with coffee-houses, and shops of various kinds. The country round about is fertile in rice and fruit.

KOMORN, the capital of the county of Komorn, in Hungary, with 11,500 inhabitants, has a gymnasium, and carries on some commerce. On the island of Schütt, 2000 paces distant, between the Waag and Danube, is a fortress, recently erected, which is rendered almost impregnable by nature and art.

KÖNIGSBERG (that is, *king's mountain*); the capital of Prussia Proper, seat of many civil and military authorities, and superior judicial tribunals; 63,800 inhabitants; 4108 houses; lat. 54° 42' 12" N.; lon. 20° 29' E. It is situated on the Pregel, not far from the influx of this river into the Frische Haff. Königsberg is an important seaport of the Baltic, and formerly belonged to the Hanseatic league. It has some considerable buildings, as, for instance, the cathedral, with the tombs of the grand masters of the Teutonic order and the dukes. The university of Königsberg was founded in 1544, by the margrave Albert I, duke of Prussia, and has at present 300 students. It is largely endowed for poor students. The library contains 60,000 volumes. The astronomer Bessel is a professor of this university. Kant taught here a long time. Large vessels cannot sail up to the city, but they are obliged to remain at Pillau, the fortress and port of Königsberg. Its commerce has very much declined.

KÖNIGSMARK, Maria Aurora, countess of, one of the many mistresses of Augustus II, king of Poland and elector of Saxony, born about 1678, was descended from one of the oldest families of Brandenburg. She was one of the most celebrated women of her age, on account of her personal charms and uncommon talents, and of the part which she performed in politics. While a girl, she wrote and spoke Swedish, German, French, Italian and English, read the classics in the original, had an extensive knowledge of history and geography, and even composed poems in French and Italian. She played on several instruments, composed music, and sang and painted with great skill. Several proofs of her talent for painting still remain at Quedlinburg. She had also a delicate wit and fine powers of conversation. Thus gifted and accomplished, she arrived, in 1694, in Dresden, with her two sisters. The elector fell in love with her at first sight. She rejected, for a long time, all his offers, though he tried every means to gain her: at last she yielded, and appeared at court as his mistress. She bore him a son, the famous marshal Saxe. (q. v.) But when the passion of the fickle king cooled, the countess knew how to sustain her misfortune with dignity; and he always remained on terms of friendship with her. By his influence she was appointed, by the court of Vienna, superintendent of Quedlinburg (in 1700), where she resided, at intervals, until her death. The king's esteem for her talents appears from the circumstance that he sent her, in 1702, to Charles XII, to negotiate a peace; but Charles refused to see her. She died in 1728. She was beloved by all around her, and very benevolent towards the poor. Her brother, count Philip Christopher, the last male of this family, was assassinated, in 1694, in the castle of Hanover, by the order of the elector Ernest Augustus, because he had offered to assist the princess Sophia Dorothea (who died in prison at Ahlen, 1726) in her projected flight.

KÖNIGSTEIN; a mountain-fortress, on the Elbe, in the kingdom of Saxony, not far from the frontier of Bohemia. It is impregnable. A solitary mountain of sandstone rises 1400 feet almost perpendicularly: the surface is more than a mile in circumference. But the fortress is of no military importance, as it cannot serve for a rallying point or point of support for an army, nor impede the march of an enemy. It is very useful, however, as a place of deposit for precious articles, for

instance, the invaluable pictures of the Dresden gallery, in times of war. It cannot be undermined, nor can it be reduced by cutting off its supplies, as the small garrison necessary to hold it, can raise grain enough for their subsistence on the top of the mountain. There is a well 1172 feet deep. About 600 people reside on the top. The cannon of the fortress command the town below it on the river Elbe. The Lilienstein (q. v.) is opposite.

KOPECK; a Russian coin. (See *Copeck*, and *Coin*.)

KOPF; German for *head*; appearing in many geographical words, for *summit*; also, *koppe*.

KORAI. (See *Coray*.)

KORAN (*Al-Koran*, i. e. *the Koran*, which means originally *the reading*, or *that which is to be read*; also called *al Forkan*, because it is divided into 114 *suras* or chapters; also *al Moshaf*, the volume; *al Kitah*, the book; *al Dhikr*, the recollection) is the religious code of the Mohammedans, written in Arabic by Mohammed. The parts were collected into a volume by Mohammed's father-in-law and successor, Abubekir. According to the Mohammedan doctrine, the prophet received the Koran from the angel Gabriel, written upon parchment made of the skin of the ram which Abraham sacrificed in the room of his son Isaac. The volume was ornamented with precious stones, gold and silver, from Paradise. According to other traditions, Mohammed is said to have drawn up the Koran with the assistance of a Persian Jew, rabbi Warada Ebn Nawsal, and a Nestorian monk, the abbot of the convent of Addol Kaisi, at Bosra, in Syria; but nothing certain is known respecting these two persons, though it appears beyond a doubt, less from the author's doctrines than from the expressions, his tales, and his mentioning several prophets, &c., that he was well acquainted with the Old and New Testament, though he himself cites only the Pentateuch and the Psalms. In the 21st chapter, he represents the Almighty as saying, "I have promised, in the books of Moses and in the Psalms, that my virtuous servants on earth shall have the earth for their inheritance." A number of passages might be quoted which prove his knowledge of the whole Bible; and not only was he acquainted with the religious systems of the Jews and Christians, but also with those of the Sabæans and Magians, from all of which he seems to have drawn materials which he incorporated into a system, after the

idea of establishing a religion in his country, where numberless sects of pagans, Jews, Christians, Sabæans and Magians existed, had risen in his mind. He lived, as is well known, much in solitude, where he doubtless meditated on his doctrine, and the great mission which he thought himself called upon to accomplish. He does not reject the doctrines of any sect, but takes from all. He asserts that he wishes to restore the true faith to its purity. The unity of God is his fundamental doctrine, which is clearly laid down in the symbol of the Moslem—"God is God, and Mohammed is his prophet." The unity of God is the very aim of his mission, and, according to him, had been the essence and the basis of all true religion, with which ceremonies and customs were only accidentally connected. Thus he says, in the 11th chapter of the Koran, "We make no difference between that which God has taught us, and that which Abraham, Isaac, Ishmael, the twelve tribes, Moses and Jesus have learned from the Lord. We believe in God, and are Moslem." And, in the 4th chapter, it is said, "God commands thee to receive the religion which he prescribed to Noah, which he has revealed unto thee, and which he imparted to Abraham, Moses and Jesus." Who can say whether it was the desire of establishing pure monotheism in his country, or ambition, which led him to call himself a prophet? But even in the way in which he speaks of his inspirations, we may discern an endeavor not to deviate from ideas already adopted, or, at least, the evidence of his being strongly influenced by them. He professed to have nocturnal intercourse with the angel Gabriel, who brought him the Koran precisely as it stands, verse for verse, chapter for chapter, from heaven. In the doctrine of the Magians, the angel Gabriel is the angel of revelation. Besides the fundamental doctrine of the unity of God, the Koran establishes several other articles of faith. Thus, in chapters 4, 6, 7 and 48, the doctrine of good and bad angels is set forth, which was general with the Arabians before Mohammed. Mohammed returns most frequently to the doctrine of the resurrection and the last judgment. The way in which he endeavors to set it forth has much similarity with that of St. Paul. He even borrows expressions from the Jewish and Christian scriptures, when he speaks of the last judgment. In chapter 43, it is said, "When the trumpet sounds the second time, they shall rise quickly

from the graves to appear before God;" and further, "A sound of the trumpet of judgment will assemble all men before my throne, and every one shall there receive the reward of his deeds." In regard to the form of the last judgment, Mohammed followed the doctrines of the Jews and Magians; for instance, the passage of the narrow bridge Al-Sirat (q. v.), the book in which all the actions of men are set down, and the scale in which they are weighed. Mohammed's paradise, too, is quite Jewish and Magian. Another dogma is set forth in the Koran, yet not explicitly, that of the unchangeable decrees of God. Mohammed used the doctrine of predestination with great success, to infuse into his adherents undaunted courage, which elevated them above all perils. Probably he adopted, in this case, views already widely spread. With the Sabæans, the belief in predestination was firmly established, and founded on the unchangeable course of the stars, and their influence upon the life and actions of men and the course of events. With the Magians this doctrine followed from their system of the good and evil principles, and probably it had passed from both to the Arabians. In regard to religious exercises, too, Mohammed adopted such as he found, giving more universality and precision to those which were vague. The Koran prescribes prayer, fasting, alms, and the pilgrimage to Mecca. The first includes every thing relating to the purifications and ablutions, by which the faithful prepares himself for prayer. Mohammed considered this exercise of the greatest importance. When the Tayesites sent an embassy to the prophet to request him to absolve them from the troublesome observance of this exercise, his answer was, "Religion is nothing without prayer." In another passage he calls prayer the "key to paradise." He surpassed the severity of the rabbis, and prescribed prayer five times a day, with the face turned towards Mecca. Turning the face, during prayer, toward a certain point, is a common custom with Orientals. It was particularly so with the Jews, Sabæans and Magians, who call the point to which they turn *kebla*. In the beginning, Mohammed adopted the same *kebla* with the Jews, i. e. the city of Jerusalem. In the second year, he changed the *kebla* to Mecca. The way which he prescribed for calling the people to prayer was at first that of the Jews and Christians, but he afterwards adopted another. To give alms, was always a particular trait of the

Arabians, but Mohammed made it obligatory. The pilgrimage, or something similar, had existed with most sects before him. In respect to the civil laws, relating to polygamy, divorce, inheritance, &c., Mohammed followed, step for step, the laws of Moses and the decisions of the rabbis, only adapting them to the customs and prejudices of his countrymen. As for the propagation of his religion, Mohammed only requires from converts the pronounciation of the words of his fundamental doctrine; he enjoins no abjuration, no violent separation from a former faith. To the Jews he says, that he only comes to restore the faith of their fathers in its purity; to the Christians, that Jesus is the best of prophets, and sometimes he wishes to pass with them as the Paraclete. Excepting the worship of idols, which was positively against his fundamental doctrines, he attacks few old customs; and, though he prohibits the use of inebriating liquors, and requires fasting, yet he says, "God intended that his religion should be easy, else, as he well knew, you would only become hypocrites"—a sentiment probably caused by the state of the Christian and Jewish sects, with which he was acquainted. The description of his paradise is voluptuous and glowing. The language of the Koran is considered the purest Arabic, and contains such charms of style and poetic beauties, that it remains imitable. Its moral precepts are pure. A man who should observe them strictly, would lead a virtuous life. "From the Atlantic to the Ganges," says Gibbon, "the Koran is acknowledged as the fundamental code, not only of theology, but of civil and criminal jurisprudence; and the laws which regulate the actions and the property of mankind, are guarded by the infallible and immutable sanction of the will of God." The Koran repeatedly enjoins belief in one God, and implicit obedience towards him, charity, mildness, abstinence from spirituous liquors, toleration, and ascribes particular merit to death in the cause of religion. It is about equal in size to the New Testament. It differs greatly from the Bible by forming one whole, instead of being a collection of very different books, unconnected with each other. The divisions sometimes have strange inscriptions. Many elevated passages adorn the Koran, but it often becomes tedious by its repetitions. The Koran is daily read once through in the mosques of the sultan and the adjoining chapels. (See *Islam*, and *Mohammed*.) It was first printed by Alex. Pagan-

nus Brixiensis, at Venice, according to some about 1509, according to others in 1518, or as late as 1530. In *Thesaur. Ambr. Albonensii Introd. in Chaldaic. Linguam* (Pavia, 1539), this edition is mentioned, and a passage cited, with reference to the sheet and the page; it has, therefore, certainly existed, but no copy is to be found in any library. The earliest edition, at present known, is by Abr. Hinkelmann (Hamb., 1694, 4to.); another, with a Latin translation (Padua, 1698, fol.); still another was published by order of Catharine II, by Mollah Usman Ismael (Petersburg, 1787, small folio; new edition, 1790 and 1793; reprinted, Kasan, 1809, fol.; another ed., Kasan, 1803, large 4to.); Latin translations after that of Robertus Retinensis (Ketenensis) (Bale, 1543, fol.; new ed., Zurich, 1550, fol.); one also by Reineccius (Leipsic, 1721); an Italian translation, made after the Latin (Venice, 1547, 4to.); French translations by And. du Ryer (Paris, 1649; Leyden, 1672, 12mo., and the Hague, 1683 or 1684, 12mo.), with the introduction by Sales, (2 vols., Amsterdam, 1770 or 1775, 12mo.); by Savary, (Paris, 1782, 2 vols.; new ed., Amst., 1786, 2 vols.; and Paris, 1798 (an VII); English versions, by Sale (London, 1734, 4to., 1764, 1801, and 1812.) The edition of London (1649, 4to.; new edition, 1688) is merely translated from the French translation of Du Ryer; German translation by Schweigger (Nuremberg, 1616; 2d edit., 1623). The Italian translation has been followed in that of Megerlin (Frankfort on the Maine, 1772), that of Boysen (Halle, 1775), and that of Augusti (Weissenfels and Leipsic, 1798). A Dutch translation of the Koran appeared at Hamburg (1641), (after Schweigger's German Koran), and another by Glazemaker (Rotterdam, 1698). A *vocabularium* of the Koran was published by Willimet and Nodockum ool Foorkan (Calcutta, 1811, 4to.)

KORNACH, in the East Indies; an elephant driver and keeper.

KÖRNER, Theodore; a German poet, particularly celebrated for the spirited poems which he composed in the campaign against Napoleon (1813), in which he fell. He was born in 1791. His father often received Schiller and Göthe in his house at Dresden. Körner first studied mining at Freyburg. In 1810, he went to the university of Leipsic, where his ardent temperament led him into acts of imprudence, which obliged him to leave Leipsic. He went to Vienna, where he wrote several dramas. In 1813, when all Germany took up arms against Napoleon

Körner served in the corps of Lützow, a Prussian officer. In the battle of Kitzen, he was severely wounded in the head, but recovered during the armistice, and, Aug. 26, 1813, fell on the field of battle, pierced by a ball. An hour before, he had finished his famous song, the Address to his Sword, and read it to his comrades. An iron monument shows the place where he rests under an oak tree, near the village of Wöbbelin, in Mecklenburg. His father has published 32 of his war songs, under the title *Leier und Schwert*—Lyre and Sword (Berlin, 6th edition, 1824). Many of these poems have been set to music by Weber, and, taken as a whole, are unique. They have all become national in Germany. Körner's father also published his other works.

KOSCIUSKO, Thaddeus, the last generalissimo of the republic of Poland, one of the noblest characters of his age, was descended from an ancient and noble, though not rich family, in Lithuania, and was born in 1756. He was educated in the military school at Warsaw. The prince Adam Czartoriski, perceiving his talents and industry, made him second lieutenant in the corps of cadets, and sent him, at his own expense, to France, where he studied drawing and the military art. After his return, he was made captain. But the consequences of an unhappy passion for the daughter of Sosnowski, marshal of Lithuania (who was afterwards married to the prince Jos. Lubomirski), obliged him to leave Poland. Solitary studies, particularly in history and mathematics, and an elevated character, prepared him for the struggle for freedom, in which he engaged under Washington, who made him his aid. He distinguished himself particularly at the siege of Ninety-Six, and was very highly esteemed by the army and the commander-in-chief. He and Lafayette were the only foreigners admitted into the Cincinnati. Kosciusko received the rank of general, and, in 1786, returned to Poland. When the Polish army was formed (1789), the diet appointed him a major-general. He declared himself for the constitution of May 3, 1791, and served under prince Joseph Poniatowski. In the campaign of 1792, he distinguished himself against the Russians at Zieloneck and Dubienka. At the latter place, under cover of some works which he had thrown up in the course of 24 hours, he repulsed, with 4000 men, three successive attacks of 18,000 Russians, who prevailed only after the loss of 4000 men. Kosciusko retired

without having suffered severely. When king Stanislaus submitted to Catharine, he, with 16 other officers, left the army, and was, therefore, obliged to retire from Poland. He went to Leipsic; and the legislative assembly of France, at this time, gave him the rights of a French citizen. The Poles becoming impatient under the oppression of Russia, some of Kosciusko's friends in Warsaw determined to make an effort for the liberation of their country. They chose Kosciusko their general, and made him acquainted with their plans. He imparted them to the counts Ignatius Potocki and Kolontai in Dresden, who thought the enterprise injudicious. Kosciusko, however, went to the frontier, and sent general Zajonczeck and general Dzialynski into the Russian provinces of Poland, to prepare every thing in silence. But when the Polish army was merged, in part, in the Russian, and the remainder reduced to 15,000 men, the insurrection broke out before the time fixed on. In Posen, Madalinski forcibly opposed the dissolution of his regiment. All now flew to arms; the Russian garrison was immediately expelled from Cracow. Just at this moment, Kosciusko entered the city. The citizens now formed the act of confederation of Cracow (March 24, 1794), and Kosciusko, at their head, called upon the Poles to restore the constitution of May 3. Kosciusko then advanced to meet the Russian forces. Without artillery, at the head of only 4000 men, part of whom were armed only with scythes and pikes, he defeated 12,000 Russians at Raclawice (April 4, 1794). His army was now increased to 9000 men, and he formed a junction with general Grochowski. In the mean time, the Russian garrisons of Warsaw and Wilna had been put to death, or made prisoners. Kosciusko checked the outbreak of popular fury, sent troops against Volhynia, and organized the government at Warsaw. He marched out of the city, with 13,000 men, to oppose 17,000 Russians and Prussians, attacked them at Szezakocini June 6, but was defeated after an obstinate conflict. He retreated to his entrenched camp before Warsaw. The Prussians took Cracow. Disturbances broke out, in consequence, in Warsaw, June 28. The people murdered a part of the prisoners, and hung some Poles who were connected with the Russians. But Kosciusko punished the guilty, and restored order. The king of Prussia now formed a junction with the Russians, and besieged Warsaw with 60,000 men. Kosciusko, however,

kept up the courage of his countrymen. After two months of bloody fighting, he repelled, with 10,000 men, a general assault. All Great Poland now rose, under Dombrowski, against the Prussians. This circumstance, together with the loss of a body of artillery, compelled the king of Prussia to raise the siege of Warsaw. Thus this bold general, with an army of 20,000 regular troops and 40,000 armed peasants, maintained himself against four hostile armies, amounting together to 150,000 men. His great power consisted in the confidence which his fellow citizens reposed in him. The nephew of the king, once his general, served under him. Kosciusko had unlimited power in the republic, but he displayed the integrity of Washington and the activity of Cæsar. He attended to procuring supplies, superintended the raising and payment of money, and prevented plundering and fraud, and was equally active in the council and the field. His days and nights, all his powers were devoted to his country. He secured the administration of justice, abolished bondage, and finally restored to the nation, May 29, in the supreme national council which he established, the great power which had been delegated to him. Catharine at length decided the contest by an overwhelming superiority of numbers. Suwaroff defeated the Poles under Sierakowski at Brzez, in Volhynia, September 18 and 19. Repnin penetrated through Lithuania, and formed a union with Suwaroff; general Fersen was to support them with 12,000 men. To prevent this, Kosciusko marched from Warsaw with 21,000 men. Ponninski was to have supported him with his division; but the Russians intercepted the messenger. The united Russian armies under Fersen attacked the Poles, who were not more than one third as strong as the Russians, October 10, at Macziewice (about 50 miles from Warsaw); they were three times repulsed, but, on the fourth attack, they broke through the Polish lines. Kosciusko fell from his horse covered with wounds, exclaiming, "*Finis Poloniae*," and was made prisoner by the enemy. In losing him, his country lost all. Suwaroff stormed Praga November 4; Warsaw capitulated on the 9th; Madalinski left Great Poland; an Austrian army appeared before Lublin. But the noble efforts of the conquered had awakened the regard of Europe towards the unhappy country, and the dearest hopes of the nation—the restoration of their monarchy, with a free constitution—found a

powerful support in public opinion. Catharine caused the hero and his noble colleagues, who were prisoners of war, to be thrown into a state-prison. Paul I gave them their liberty, and distinguished Kosciusko by marks of his esteem. He presented his own sword to the general, who declined it with these words—"I no longer need a sword, since I have no longer a country." To the day of his death, he never again wore a sword. Paul then presented him with 1500 peasants, and his friend Niemcewicz, the poet, with 1000. When on the Russian frontier, Kosciusko declined this present by a letter. He and his friend now went by the way of France and London, where Kosciusko was treated with distinction, to America (1797). His fortune was very small. On his return to his native country after the war of the revolution, he had received a pension from America, and he now found there such a reception as he deserved. In 1798, he went to France. His countrymen in the Italian army presented to him the sabre of John Sobieski, which had been found (1799) at Loreto. Napoleon afterwards formed the plan of restoring Poland to its place among the nations, and thus, at the same time, injuring Russia and extending his own power over the east of Europe. But Kosciusko would take no part in this struggle, which was conducted by Dombrowski, in 1807 and 1808, being prevented less by ill health than by having given his word to Paul I never to serve against the Russians. To Napoleon's proposals he answered, that "he would exert himself in the cause of Poland, when he saw the country possessed of its ancient territories, and having a free constitution." Fouché tried every means to carry him to Poland. An appeal to the Poles, which appeared under his name in the *Moniteur* of November 1, 1806, he declared to be spurious. Having purchased an estate in the neighborhood of Fontainebleau, he lived there in retirement until 1814. April 9, 1814, he wrote to the emperor Alexander to ask of him an amnesty for the Poles in foreign lands, and to request him to become king of Poland, and to give to the country a free constitution, like that of England. In 1815, he travelled with lord Stewart to Italy, and, in 1816, he settled at Soleure. In 1817, he abolished slavery on his estate of Siecnowicz, in Poland. He afterwards lived in retirement, enjoying the society of a few friends. Agriculture was his favorite occupation. A fall with his horse from a precipice, not

far from Vevay, occasioned his death, Oct. 16, 1817, at Soleure. He was never married. In 1818, prince Jablonowski, at the expense of the emperor Alexander, removed his body, which, at the request of the senate, the emperor allowed to be deposited in the tomb of the kings at Cracow. A monument was also erected to his memory, and the women of Poland went into mourning for his loss.

KOSEGARTEN, Louis Theobul, a poet and preacher, was born Feb. 1, 1758, at Grevesmühlen, a small town of Mecklenburg, studied at Greifswald, was for a long time a tutor in the family of a nobleman in Pomerania, became, in 1792, a preacher at Altenkirchen, in the island of Rugen, and was made, in 1793, doctor of theology. Upon this patriarchal island he lived in the enjoyment of nature, his family, poetry, literature, and in a faithful discharge of the duties of his office, a number of happy years, till he received, in 1807, an invitation to a professorship at Greifswald. He died there, Oct. 26, 1818, rector of the university, in the 61st year of his age. The fruits of his leisure hours—his romances, for instance, *Ida von Plessen* (2 vols.); his rhapsodies, his legends, his epic-idyllic poems *Jukunde*, and the *Inselfahrt*; his patriotic songs; several translations, of which Richardson's *Clarissa* is the most distinguished—have obtained for him no mean rank in German literature. His muse, often full of natural power and fire, frequently runs into bombast and prolixity. His collected poems appeared at Greifswald, 1824, in twelve volumes.

KOSLOFF, Iwan, a Russian nobleman, born about 1780, passed his youth in the great world. In the social circles of the nobles of Moscow and St. Petersburg, he led an animated rather than a busy life. His genius was not as yet awakened; still he loved literature, was master of the French and Italian languages, and familiar with their classics. But he had recourse to these studies only when in want of occupation, and to recruit his mind exhausted by dissipation. His activity was mainly devoted to the pleasures of the world and the care of his family. When about 40 years old, he was attacked with a severe sickness, which deprived him of the use of his feet. Removed thus at once from the company which he loved, loneliness compelled him to seek in himself an indemnification for the loss of worldly pleasure. This stroke did not prostrate him: on the contrary, his mind took a higher flight. He became a poet. The

ideal world which he now inhabited indemnified him fully for the reality of which he was deprived. Upon his bed of pain, he learnt to know himself, and discovered in himself a talent hitherto unknown to him. In a short time, he made himself familiar with the English language and literature. Yet a more severe trial awaited him: he lost his sight. This misfortune did not depress his courage: on the contrary, he made it a means of moral and spiritual elevation. With his blindness burst forth his poetic spirit. He soon commenced the study of the German language, and made himself acquainted with the classical poetry of Germany. Since then Kosloff has lived in the world of recollection and of fancy. He is endowed with an extraordinary memory, and retains every thing which he learns. He writes poetical epistles to his friends, who gather around him, not to cheer him, but to delight themselves with his conversation. That providence which veiled his eyes, said to his soul, "Let there be light." His conversation is rich and full of spirit. Notwithstanding the trifling character of his early life, he takes a lively interest in all that is noble, great and manly. Kosloff has made some very good translations from English and Italian poetry. His *Monk*, in poetic power, reminds one of Byron's *Giaour*. His translation of the *Bride of Abydos* was published at St. Petersburg, 1826. Kosloff has of late been employed on a great work, the materials of which are taken from Russian history, in the time of the empress Anne.

KOTTAH (Sanskrit, for *dwelling*); the ending of a great number of Hindoo geographical names, like the German *Heim* (q. v.) and the English *ham*. (q. v.)

KOTZEBUE, Augustus Frederic Ferdinand von, a prolific German writer, was born May 3, 1761, at Weimar. At the age of 16 years, he entered the university of Jena, where his inclination for the drama, already awakened at Weimar by the celebrated company of players in that city, was confirmed by his connexion with a private theatre. The marriage of his sister to a gentleman of Duisburg induced him to enter the university, then at that place; but, in 1779, he returned to Jena, and studied law; without, however, ceasing to compose for the theatre. On leaving the university, he was admitted a lawyer. He imitated Schiller, Göthe, Wieland, Hermes, Brandes and Musæus. In 1781, he went to St. Petersburg, at the suggestion of the Prussian minister at that court, and became secretary to the gov-

ernor-general, Von Bawr, who died two years afterwards. He had, however, recommended Kotzebue to the empress, and she became his patroness. He was finally appointed president of the government of Esthonia, and, as such, was ennobled; in consequence of which he wrote his work *On Nobility*, in which he defended this institution, after having often attacked it as a poet. In 1790, on a journey to Pyrmont, he published his notorious *Doctor Bahrdt with the Iron Forehead*, under the name of *Knigge*, by which he sunk greatly in the public esteem. In 1795, he retired to a country place about 35 miles from Narva, in Esthonia, but soon after removed to Weimar, with a pension of 1000 guilders, and again returned to Petersburg, where his sons were educated in the imperial military school. Although he had a passport, yet, on his arrival at the frontiers, he was arrested, and sent to Siberia, without learning the reason. A small drama of his, an indirect eulogy of Paul I, was translated into Russian, and laid, in manuscript, before the emperor, who was so delighted with it, that he recalled Kotzebue, and took him into favor. After the death of this emperor, he again went to Germany. In 1802, he was chosen member of the academy of sciences of Berlin,—by what intrigues we do not know,—and, with Merkel, formed a party against Göthe and Schlegel, in which contest the latter, of course, were much superior. In 1806, he went again to Russia, to avoid the French, and lived, from 1807, on his estate Schwartze, in Esthonia, never ceasing to write against Napoleon. In 1813, as counsellor of state, he followed the Russian head quarters, constantly writing to excite the nations against Napoleon, and published, in Berlin, the Russian-German National Gazette (*Volksblatt*). In 1814, he produced a very poor history of the German empire. He had already proved himself totally unfit for a historian by his *Early History of Prussia* (Riga, 1809). In 1817, he received a salary of 15,000 roubles, with directions to reside in Germany, and to report upon literature and public opinion. Kotzebue, who, during the whole campaign, had written in favor of the Russians, even at the expense of his native country, was now considered by most Germans as a spy. He established the *Literary Weekly Paper*, in which he passed judgment on the publications of the day, and advanced political opinions equally dishonorable and obnoxious to Germany, ridiculing every attempt at liberal institutions. The

state of things before the French revolution was his standard of perfection. Kotzebue was regarded with aversion by the liberal party in Germany, as an enemy to the freedom of his country; and among the young and ardent, his ridicule of their noblest sentiments and most cherished hopes awakened bitter hatred. This feeling was so strong in the case of a young enthusiast named Sand (q. v.), that he formed the plan of putting Kotzebue to death, as the enemy of his country, and deliberately murdered him, March 23, 1819, after which he immediately gave himself up to justice. Kotzebue was three times married, and left 13 children. His best productions are his comedies, which seem to be much more popular with foreigners than with Germans. A sickly sentimentality in his graver dramas, and the insipidity of his comedies, are seldom redeemed by higher excellences. He wrote 98 dramas. As a historian, he deserves to be mentioned only for a few documents reprinted in his *Prussian History*.

KOTZEBUE, Otto von; son of the preceding; captain in the Russian navy. He served as midshipman under Krusenstern (q. v.) on his voyage round the world. In 1814, he himself made a voyage round the world, at the expense of count Romanzoff, in the ship *Rurik*, and returned in 1818. In 1824, he undertook a third voyage round the world, as commander of an imperial man-of-war, discovered two islands in the South sea, reached Kamtschatka in June, 1824, and returned, in July, 1826, to Cronstadt. It does not appear that Von Kotzebue's voyages have been of great service to science. (See *Neue Reise um die Welt in den Jahren 1823, 24, 25, und 26, von Otto von Kotzebue* [English, London, 1830], 2 vols., Weimar and St. Petersburg, 1830.)

KOULI KHAN. (See *Nadir Shah*.)

KOURD; strong, robust; a Persian word. Hence the name of *Kurdes*, *Kourdes*, or *Curdes*, and *Curdestan*.

KRAKEN, KRAXEN, or, as some call it, KRABEN; that word, says Pontoppidan, bishop of Bergen, being applied, by way of eminence, to the fish otherwise called *horven*, *soe-horven*, *anker-troll* and *kreuzfisch*, "incontestably," as observes the same naturalist (whose description of it we shall give in a translation of his own words), "the largest sea-monster in the world. It is round, flat, and full of branches. The Norwegian fishermen unanimously affirm, and without the least variation in their accounts, that, when they row out several miles to sea, particularly

in the hot summer days, and, by their situation (which they know by taking a view of certain points of land), expect to find 80 or 100 fathoms water, it often happens that they do not find above 20 or 30, and sometimes less. At these places, they generally find the greatest number of fish, especially cod and ling. Their lines, they say, are no sooner out, than they may draw them up with the hooks all full of fish; by this, they judge that the kraken is at the bottom. They say this creature causes these unnatural shallows mentioned above, and prevents their sounding. These the fishermen are always glad to find, looking upon them as a means of their taking abundance of fish. There are sometimes 20 boats or more got together, throwing out their lines at a moderate distance from each other, and the only thing they have to observe is, whether the depth continues the same, which they know by their lines, or whether it grows shallower, by their seeming to have less water. If this last be the case, they find then the kraken is raising himself nearer the surface, and then it is no time for them to stay any longer; they immediately leave off fishing, take to their oars, and get away as fast as they can. When they have reached the usual depth of the place, and find themselves out of danger, they lie upon their oars, and, in a few minutes after, they see this enormous monster come up to the surface of the water. He there shows himself sufficiently, though his whole body does not appear, which, in all likelihood, no human eye ever beheld, excepting in the case of one of the young of this species, which shall afterwards be spoken of. Its back or upper part, which seems to be in appearance about an English mile and a half in circumference—some say more, but I choose the least for greater certainty—looks at first like a number of small islands, surrounded with something that floats and fluctuates like sea-weeds. Here and there, a large rising is observed, like sand-banks, on which various kinds of small fishes are seen continually leaping about, till they roll off into the water from the sides of it. At last, several bright points or horns appear, which grow thicker and thicker the higher they rise above the surface of the water, and sometimes they stand up as high and large as the masts of middle-sized vessels. It seems these are the creature's arms; and it is said, if they were to lay hold of the largest man-of-war, they would pull it down to the bottom. After this monster has been on the surface of

the water a short time, it begins slowly to sink again; and then the danger is as great as before, because the motion of his sinking causes such a swell in the sea, and such an eddy or whirlpool, that it draws every thing down with it." The arms above described are conjectured to be tentacula, and the kraken itself to be an enormous polypus. Besides these arms, "the great Creator has also given this creature a strong and peculiar scent, which it can emit at certain times, and by means of which it beguiles and draws other fish to come in heaps about it." During many months, the kraken is continually employed in eating; during many others, in carrying on the very last process which succeeds digestion; and this operation is so peculiarly agreeable to "the smell and taste of other fishes, that they gather together from all parts to it, and keep for that purpose directly over the kraken: he then opens his arms or horns, seizes and swallows his welcome guests, and converts them, after the due time, by digestion, into a bait for other fish of the same kind. I relate what is affirmed by many; but I cannot give so certain assurance of this particular as I can of the existence of this surprising creature, though I do not find any thing in it absolutely contrary to nature. As we can hardly expect an opportunity to examine this enormous sea-animal alive, I am the more concerned that nobody embraced that opportunity, which, according to the following account, once did, and perhaps never more may offer, of seeing it entire when dead. The reverend M. Friis, consistorial assessor, minister of Bodoen, in Nordland, and vicar of the college for promoting Christian knowledge, gave me, at the latter end of last year, when he was at Bergen, this relation, which I deliver again on his credit. In the year 1680, a kraken, perhaps a young and careless one, came into the water that runs between the rocks and cliffs in the parish of Alstahoug, though the general custom of that creature is to keep always several leagues from land, and therefore, of course, they must die there. It happened that its extended long arms or antennæ, which this creature seems to use like the snail, in turning about, caught hold of some trees standing near the water, which might easily have been torn up by the roots; but, besides this, as it was found afterwards, he entangled himself in some openings or clefts in the rock, and therein stuck so fast, and hung so unfortunately, that he could not work himself out, but perished and putre-

fied on the spot. The carcass, which was a long while decaying, and filled great part of the narrow channel, made it almost impassable by its intolerable stench." The animal seen by the reverend Donald Maclean, of Small Isles, and attested by him in a letter to the Wernerian Natural History Society of Edinburgh, though not quite so large as the Norwegian kraken, certainly tends to confirm a belief that, with due allowance for exaggeration, monsters of a larger size than philosophy has dreamed of, really do exist in the Northern seas, or, in the well-expressed phrase of doctor Barclay, in his paper relating to this animal, that there are "grounds sufficient to awaken the curiosity of naturalists, who, it were to be wished, were always men of accurate discrimination and sound judgment, not prone to indulge in a passion for the marvellous, nor apt to be infected with the silly conceit, that their knowledge of nature is already so complete, that little of importance remains to be discovered." (*Transactions of W. N. H. S.*, 430.) Mr. Maclean's account is not a little curious. "According to my best recollection," says he, "I saw it in June, 1808, not on the coast of Eigg, but on that of Coll. Rowing along that coast, I observed, at about the distance of half a mile, an object to windward, which gradually excited astonishment. At first view, it appeared like a small rock. Knowing there was no rock in that situation, I fixed my eyes on it close. Then I saw it elevated considerably above the level of the sea, and, after a slow movement, distinctly perceived one of its eyes. Alarmed at the unusual appearance and magnitude of the animal, I steered so as to be at no great distance from the shore. When nearly in a line betwixt it and the shore, the monster, directing its head, which still continued above water, towards us, plunged violently under water. Certain that he was in chase of us, we plied hard to get ashore. Just as we leaped out on a rock, taking a station as high as we conveniently could, we saw it coming rapidly under water towards the stern of our boat. When within a few yards of the boat, finding the water shallow, it raised its monster-head above water, and, by a winding course, got, with apparent difficulty, clear of the creek where our boat lay, and where the monster seemed in danger of being embayed. It continued to move off with its head above water, and with the wind, for about half a mile, before we lost sight of it. Its head was rather broad, of a form somewhat oval;

its neck somewhat smaller; its shoulders—if I can so term them—considerably broader; and thence it tapered towards the tail, which last it kept pretty low in the water, so that a view of it could not be taken so distinctly as I wished. It had no fin, that I could perceive, and seemed to me to move progressively by undulations up and down. Its length I believed to be from 70 to 80 feet. When nearest to me, it did not raise its head wholly above water, so that, the neck being under water, I could perceive no shining filaments thereon, if it had any. Its progressive motion under water I took to be rapid, from the shortness of time it took to come up to the boat. When the head was above water, its motion was not near so quick; and when the head was most elevated, it appeared evidently to take a view of distant objects. About the time I saw it, it was seen about the island of Canna. The crews of 13 fishing boats, I am told, were so much terrified at its appearance, that they, in a body, fled from it to the nearest creek for safety. On the passage from Rum to Canna, the crew of one boat saw it coming towards them with the wind, and its head above water. One of the crew pronounced its head as large as a little boat, and each of its eyes as large as a plate. The men were much terrified, but the monster offered them no molestation. (*Id.* 442).—The appearance described by Mr. Maclean calls to mind the sea-serpents which have been so often reported, of late years, as seen on the coast of New England. Whatever may be the animal which has given rise to these stories, the kraken described by Pontoppidan can hardly be supposed to be a real existence. The story probably grew out of the appearance of islands which have risen above the surface of the sea, and become again submerged, or of rocks only visible at particular seasons, or of floating islands, &c. The young kraken which he describes was probably some large sea-monster, whose appearance had become much exaggerated in the course of narration.

KRANACH, Lucas. His proper name was *Sunder* or *Sünder*, but he was called *Kranach*, from the place where he was born (1472), in the bishopric of Bamberg. He went to Coburg, after having learned a little of the art of painting from his father, who was a form-cutter and card-painter. The elector Frederic the Wise admitted him to his court. He accompanied him on his journey to Palestine, in 1493. In 1504, he was appointed painter to the

elector and his brother, duke John Frederic, was made a noble, and, in 1537, burgomaster of Wittemberg, accompanied the elector John Frederic in his captivity to Inspruck, returned with him, and died in 1553, at Weimar. He painted much, and the *quid pro quo* of the stone-cutter, who put on his tomb-stone *pictor celerissimus* (the quickest painter), instead of *pictor celeberrimus* (the most famous), was not inappropriate.—His son, of the same name, who was also burgomaster at Weimar, where he died in 1586, may have painted many of the pieces ascribed to Kranach. We are most indebted to Kranach for his portraits of Luther, Melancthon, and other persons, famous at the time of the reformation. His historical paintings always seemed to us dull histories indeed, and his numerous representations of Adam and Eve are little better than libels on the work of creation.

KRASICKI, Ignatius, count of Sietzen, archbishop of Gnesna, a poet and author, was born at Dubiecko, February 3, 1735. When the partition of Poland, in 1772, obliged him to give up his office in the senate of the republic, he turned his attention to science. He excelled in describing the ridiculous in the national customs of his country. His conversation was agreeable and witty. Frederic the Great once said to him, "I hope, Mr. Archbishop, you will carry me under your episcopal cloak into Paradise." "No, sire," answered Krasicki, "your majesty has cut it so short, that it will not serve for smuggling." Among the works of this poet are his mock-heroic poem *La Mycheide*, or *La Souviade*, in 10 cantos, translated into French, the subject of which is from the ancient chronicle of bishop Kadlubek, which describes how mice and rats eat up king Popiel; also his War of the Monks (*La Monomachie*), in six cantos, perhaps his masterpiece. Frederic the Great is said to have induced him to write it, when he lodged him in the room in Sans Souci, where Voltaire had lived, with the intimation that it would doubtless inspire him with poetical ideas. His *Antimonomachie*, also in six cantos, has less merit. Several of his fables are classic; not so his satires. The War of Choczim, in twelve cantos, describing the victory of Choczkiw over sultan Osman, under the reign of Sigismund, has too much of a historical character. His prose works are full of spirit. The writings of Krasicki are classical among the Poles. He died at Berlin, March 14, 1801. Dmachowski collected most of his works, and published

them at Warsaw, 1803 et seq., in 10 volumes.

KREML, in the Tartar languages, signifies a *fortress*. Hence the name of *Kremlin*. (q. v.)

KREMLIN; part of Moscow, in the centre of the city, containing only the royal edifices and churches, particularly the residence of the emperor. It is surrounded by three thick walls and a deep foss, with batteries. In the Kremlin are two convents, and many churches, particularly the cathedral, in which the coronation of the Russian emperors is performed. In the church of the archangel Michael is the sepulchre of the emperors, and behind it the house of the former patriarch, where the synod now assembles, and a library is kept, which is rich in Greek and Russian manuscripts. In the castle, the imperial colleges have their sessions; the arsenal is also there. In 1812, when Moscow was burnt by the Russian authorities, part of the Kremlin was also destroyed. When Napoleon left Moscow, marshal Mortier received orders to blow it up. Alexander restored it.

KREMNIETZ. (See *Cremnitz*.)

KRONSTADT. (See *Cronstadt*.)

KRUDENER, Juliana, baroness of; born about 1766, in Riga. Her father, baron Vietinghoff, one of the richest landed proprietors in Courland, gave her a careful education. When a young girl, her parents took her to Paris, where her father's house was the resort of men of talents, and her wit, beauty and cheerfulness were admired. In her 14th year, she was married to baron Krüdener, a Livonian, about 36 years old. She accompanied her husband to Copenhagen and Venice, where he was Russian minister. In these places, and in Petersburg, Madame Krüdener, placed by rank and wealth in the first circles, was one of their most brilliant ornaments. She was surrounded by admirers of her talents and beauty; but she was not happy. She became the mother of two children; but, as she herself indicates, in a letter to her son-in-law, her natural liveliness of temperament and the allurements of the world led her into levities, which finally caused a divorce from her husband. In 1791, she returned to her father's house in Riga, where she was universally considered one of the most amiable and accomplished ladies, with a feeling heart and lively imagination. But Riga did not satisfy her, and she lived alternately in Paris and Petersburg in Russia. Her love of dissipation involved her, in Paris

as well as in Petersburg, in many difficulties. In the former place, the fierce Garat is said to have been master of her heart. In the midst of these circumstances, she wrote a novel, of which she had formed the plan at an earlier period, *Valérie, ou Lettres de Gustave de Lînar à Erneste de G.*, in which she delineated certain scenes of her own life. The disasters of Prussia arrived, and madame Krüdener, being then about the person of the queen of Prussia, and participating in her affliction, turned her mind from the pleasures of the world to the subject of religion, though, perhaps, as is often the case, little change may have been produced in the essentials of her character. Ambition, a lively sensibility, and love of excitement, seem to have remained the great springs of her actions. She was now attracted by the principles of the Moravians. She again went to Paris, where she found many disciples—a fact easily explained, from the circumstance, that the highest circles of Paris always contain a number of persons who, having been accustomed to live on excitements from early youth, and having become sickened with those of fashionable life, turn with pleasure to those of devotion. On the commencement of the war of the northern powers against Napoleon, madame Krüdener went to Geneva (1813). In Carlsruhe, she became connected with the mystical Jung. (q. v.) She began to believe herself called to preach the gospel to the poor. She therefore went into the prison at Heidelberg, and preached to the criminals condemned to death. In 1814, she returned to Paris. Here she became acquainted with Alexander, emperor of Russia, who had already for some time shown a disposition to religious contemplations. According to a late publication of a companion of madame Krüdener, M. Empeytas, her conversations with the emperor had a great influence on him. In Paris, she had prayer-meetings, attended by distinguished personages, where she was seen in the background of a suite of rooms, in the dress of a priestess, kneeling in prayer. It is very generally believed, that her conversations, in Paris, with Alexander, were mainly instrumental in suggesting the idea of the holy alliance (q. v.); it is certain, that, in her later sermons, she held it up almost as a new covenant. She gave a description of the feast celebrated by the Russian army in the plains of Chalons, under the title *Le Camp de la Vertu* (Paris, by Normand), in which she gives her views respecting the history of

the time. In 1815, she went to Bâle, where a small community of devout mystics was already collected. Here a young clergyman of Geneva, the above-mentioned Empeytas, followed her, and preached in the prayer-meetings which the baroness held every evening. Women and girls went ardently to these prayer-meetings, and gave liberally to the poor, often to a degree much beyond what they could afford. These meetings, as is too often the case under circumstances of similar excitement, had a bad moral effect. Cases were reported which excited great scandal, and a preacher named Fäsch finally denounced the priestess. The magistracy of Bâle obliged her to leave the city. She experienced the same treatment in Lörrach, Aarau, &c.; yet, according to the common course of things, the number of her followers increased, particularly among young females. At the same time, she carried on an extensive correspondence; money was sent her from great distances. In 1816, with her daughter, she went to reside not far from Bâle, in Baden, on the Horn of Grenzach. Besides M. Empeytas, she was accompanied by professor Lachenal, of Bâle, and a Mr. Kellner. Here she assembled many poor people, great numbers of whom were vagabonds, whom she provided with food and lodging, without labor. These were very ready to profit by the kindness of the good, benevolent lady, who preached against the coldheartedness of the rich, as the source of all evil. The public peace was so much disturbed by these proceedings, that the Horn was surrounded by soldiers in 1817, and the disciples of madame Krüdener carried away to Lörrach. She wrote, in consequence, a remarkable letter to the minister at Carlsruhe, in which she spoke of the "desert of civilization" through which she was obliged to wander, and reminded him of the law of God, requiring the authorities to take care of the poor. She now travelled about, preaching in the open air, often surrounded by 3000 people, and giving bountifully to the poor. Wherever she arrived, she was under the surveillance of the police. In Leipsic, police officers were at length even placed at her door, so that nobody could be admitted to see her. Mr. Krug, professor of philosophy in the university of that city, published *Gespräch unter vier Augen mit der Frau von Krüdener* (Leipsic, 1818), according to which she appeared as an estimable enthusiast, pouring out pious effusions, mingled with arrogant prophecies. At length the police

transported her to the Russian frontier, where she received orders not to go to Petersburg, nor to Moscow. In 1824, she went, with her daughter and her son-in-law, to the Crimea, and died there the same year, Dec. 13, at Karafubasar. Madame Krüdener is one more instance that ardent zeal and good intention (for it is probable that she considered herself to be doing right) are by no means sufficient to render one capable of effecting a great reformation.

KRUG, William Traugott, professor at the university of Leipsic, a very active writer on philosophy, was born June 22, 1770, at Radis, a village in the circle of Wittenberg, in Saxony, where his father was a wealthy farmer. From 1782 to 1788, he studied at the famous *Schulppforte*; and, from 1788, he studied, for four years, theology, philosophy, history, mathematics, &c., at Wittenberg. In 1794, he settled there as adjunct of the philosophical faculty, and lectured for seven years, without salary. His Letters on the Perfectibility of Revealed Religion, which he published when a student, prevented him from receiving an appointment as *professor extraordinarius*, though he lectured with great applause and success. He now abandoned theology and preaching, and lectured only on philosophy, philology, and scientific subjects. In 1801, he was appointed professor at the university of Frankfort on the Oder. In 1805, he was made *professor ordinarius* at the university of Königsberg, in the place of Kant. Krug belonged to the *Tugendbund*. (q. v.) In 1809, he accepted an invitation to Leipsic, where he continues to lecture as *professor ordinarius* of philosophy. Krug has written a great deal on philosophical and on political subjects, and shows himself inclined to liberal views, in opposition to Ancillon, Schmaltz, Von Haller, &c. In the late excitements which have existed in Germany between the Catholics and Protestants, he took part with the latter. He is now writing a Philosophical Dictionary, in 4 volumes. A list of his works would much exceed our limits. Among other works, he has written one on Faith and Knowledge. In 1826, he published Ecclesiastical Law, represented according to the Principles of Reason and in the Light of Christianity (Leipsic); in 1823, a Historical Representation of the Liberalism of Ancient and Modern Times (Leipsic); in 1824, *Dicæopolitics*, or the Latest Restoration of the State in the Way of Justice (Leipsic). He has been a contributor to the Leipsic Literary Gazette since 1812.

KRUNITZ, John George, physician at Berlin, was born 1728, studied at Göttingen and at Frankfort on the Oder. In 1759, he returned to Berlin, devoted his whole life to literary pursuits, and died in 1796. A great number of useful publications upon medicine, natural history, geography, and other subjects, original and translated from various languages, are the fruits of his industry. His chief work is the *Ökonomisch-technologische Encyclopädie*, which he began in 1773. It amounted to 73 volumes, and had just reached the article *Leiche* (corpse), when he was removed by death. The work is valuable, as containing much matter carefully selected. There is, however, a want of method and proportion in it. After his death, the brothers Flörke, and, since 1815, J. W. D. Korth, have continued the work, which, in 1823, amounted to 142 volumes, and reached as far as *SCH*. The abridgment of the large work, thus far, amounts to 32 volumes.

KRUSENSTERN, Adam John, chevalier de; since 1826, royal Russian commodore, and second director of the marine corps of cadets, and well known for his voyage round the world, in 1803—6. Before him, indeed, the Russians had made many voyages of discovery; but Krusenstern's voyage surpassed those of his predecessors in its extent and its results. Before him, Russian navigators, in the Atlantic ocean, had never reached the tropics. Krusenstern sailed from lat. 60° N. to 60° S., in the western hemisphere, and, on this voyage of more than three years, he lost not a single man. The descriptions of this voyage of discovery have appeared in print. The emperor Alexander caused every thing to be done for the success of this scientific enterprise, and, among other things, purchased the best instruments of Troughton, Arnold and Pennington. He rewarded the navigator with great liberality. He bestowed upon Krusenstern's wife the income of an estate which amounted to 1500 roubles yearly, in order, as he expressed it, to comfort her husband during his absence, in regard to the condition of his family. The honor of the enterprise, however, both in plan and execution, is due to the modest Krusenstern. No navigator has combined more philanthropy, care, and sacrifice of his own convenience, with a comprehensive knowledge of his own department. Von Krusenstern had already made himself known in the literary world by an essay in Storch's Annals, in which he exhibits the difficulties of trading by way of

Ochotsk to the islands and coasts of America, and showed that this trade could not become important, until ships should go to the North-West Coast of America by passing out of the Baltic round cape Horn or the cape of Good Hope. But, if Russia would take part in the direct trade with China and India, he saw that she must obtain seamen acquainted with the Indian ocean. Krusenstern had collected the necessary information on this subject in the war of 1793—1799, when he served on board the English fleet. Count Woronzoff, the Russian ambassador at the English court, now procured for him an opportunity to go to India, on board a British vessel, bound to China. He remained at Canton during 1798 and 1799, and there acquired a knowledge of the advantages which would accrue to the Russian possessions on the American coast, from the direct transportation of furs to this place. As soon as count Romanzoff, the minister, and Mordwinoff, the admiral, directed the mind of Alexander to Krusenstern's proposal, he took up the subject, and intrusted this active seaman with the charge of making a closer examination of the North-West Coast of America, according to instructions drawn up by count Von Romanzoff, then minister of commerce, afterwards chancellor of the empire. A secondary object was ultimately combined with the same; viz. to renew the commercial connexions of Russia with Japan, at Nangasacki, which, since Laxman's voyage to Japan, had been broken up. Two ships were intrusted to him—the *Nadeshda* and the *Neva*. He gave the command of the *Neva* to the lieutenant-captain Lisanskoy. Oct. 5, 1803, he left the road of Falmouth. Nov. 26, the Russian flag waved for the first time on the other side of the equator. Aug. 19, 1806, he returned in the *Nadeshda* to Cronstadt. (See *A Voyage round the World in the Years 1803—1806, by the Command of his Majesty the Emperor Alexander I, in the Ships Nadeshda (the Hope) and Neva, under the Command of A. J. Von Krusenstern, Captain of the royal Marine, Petersburg, 1810—12, 4to.*) The two first parts contain the narration of the voyage; the third part contains treatises upon natural history and physico-nautical subjects. The atlas contains 16 plates concerning Japan, and representations of subjects in natural history and ethnography. A second edition of this work appeared in Berlin (in 12mo., in 1811—12, with a portrait of the author, and with copperplates). An English translation of Krusenstern's voy-

age, by Goppner, is incomplete, and disfigured by a multitude of mistakes. Captain Lisanskoy has also written an account of the voyage, performed in the *Neva*, round the world, in the Russian language (Petersburg, 1813, in two parts). G. H. von Langsdorf has published *Observations upon a Voyage round the World, in the Years 1803—7* (2 volumes, 4to., with copperplates, Frankfort on the Maine, 1812); of which, however, only the first volume relates to Krusenstern's voyage, as Langsdorf, in 1805, left the expedition in Kamtschatka, and returned home by land through Siberia. This work has also been translated into English. Krusenstern discovered the Orloff islands, and gave much information respecting the New Marquesas, or Washington's islands, especially Nookahiva and the straits of Sangaar. He added particularly to the geography of Australia, of the coast of the islands of Japan and those in the Chinese sea. But the island lying east of Japan, which the Spaniards were said to have discovered in 1610, Krusenstern was as unsuccessful in finding as Bries and Lapérouse before him. On the other hand, he carefully examined the western coast of the island of Jedso, the straits of Lapérouse, and the coasts of the island of Saghalien. Krusenstern's desire to reestablish commercial connexions with Japan failed of being gratified, and the chamberlain Von Resanoff, who had been appointed ambassador thither, was not received. The result of this voyage will become truly important, in a commercial view, if the proposed improvements, in the management of the Russian colonies in the Aleutian islands and the North-West Coast, to the abuses in which Krusenstern's attention was directed, are carried into effect. Krusenstern's official report, concerning captain Golownin's voyage for the examination of the Kurile islands, contains the latest proofs of the odium which the Russians have brought upon themselves in Eastern Asia. Krusenstern's voyage therefore is interwoven, in more than one respect, with the history of the Russian empire. Of his literary labors, which have particularly enriched nautical geography, proofs are contained in the *Universal Geographical Ephemerides*; among others, the essay concerning Maldonado's supposed discovery of a north-west passage in the year 1588, and his *Mémoire sur une Carte du Détroit de la Sonde et de la Rade de Batavia*. He has also published *Vocabularies of the Languages of several Nations of Eastern Asia*

and the north Coast of America (Petersburg, 1813, 68 pages, 4to.); Contributions to the Hydrography of the great Oceans (Leipsic, 1819, 4to.); and a *Recueil des Mémoires hydrographiques pour servir d'Explication à l'Atlas de l'Océan Pacifique* (Petersburg, 1824, 4to., with an atlas in 15 plates, folio). Captain von Kotzebue (q. v.) was educated in his school. Krusenstern's invention for securing the magnetic needle against the influence of cannon, and other iron substances, by enclosing the compass in metallic plates, was introduced by the Russians, in 1825.

KUH, Ephraim Moses, born 1731, of Jewish parents, showed early an uncommon strength of memory, vivacity of mind, and a restless desire of knowledge. His father, a rich trader, intended at first to educate him in Jewish learning; and, when the result by no means answered his expectations, he desired to make him a merchant. He allowed him to receive instruction in the French, Italian and English languages, by which means he attained a knowledge of modern literature and poetry. After his father's death, he went to Berlin, as first clerk in the counting-house of his uncle. Here his talents gained him the friendship of Mendelssohn, Ramler, Lessing, and other learned men, by intercourse with whom his poetical talent began to be developed. He possessed considerable property, besides a good salary; but his easy good-nature, which made him often the prey of the fraudulent, united with an extravagant love of books, in a few years, exhausted his means. He left Berlin, travelled through Holland, France, Italy, Switzerland and Germany, and became, at last, dependent on his family. These circumstances produced in him a fixed melancholy, which at length increased to insanity, from which he was restored only by the activity of a skilful physician. In his lucid intervals, he produced the best of his poems. In 1785, he was deprived of strength and speech by apoplexy, in which state he died, 1790. Posthumous Poems, by Ephraim Moses Kuh, appeared in Zurich, in 1792.

KULM. (See *Culm*.)

KUNERSDORF. (See *Cunersdorf*.)

KURDS. (See *Curds*.)

KURILES; a long range of small islands at the eastern extremity of Asia, extending from the southern point of Kamtschatka to the isle of Jesso, or Matsmai, which belongs to Japan. The whole length of the chain amounts to nearly 900 miles. Some of the islands are not inhabited, and

several are even uninhabitable, on account of the absolute want of water. Others are fertile, well wooded, full of game and fish. Some contain volcanoes; and they are all subject to frequent earthquakes. The number, without reckoning Jesso, is 25. They were successively discovered, in the eighteenth century, by the Russians, and have been accurately known only since Krusenstern's voyage. The inhabitants are perhaps a thousand, and are known by the name of *Kuriles*, which is applied also to the people of the neighboring coasts of Asia, and of the southern part of Kamtschatka. They are heathens, and some of them resemble, in language, shape and manners, the Japanese. Others, on the contrary, resemble the people of Kamtschatka, many of whom, on the conquest of Kamtschatka by the Russians, fled to the Kurile islands. Some of the islands have inhabitants descended from each of these stocks. The southern Kuriles are under Japanese government: the northern (21), on the contrary, are subject, in some measure, to Russia, and furnish, mostly under compulsion only, a tribute of sea-otter skins, fox skins, and other peltry. The chain extends from lat. 42° to 51° N.

KUTUSOFF (Golenischtscheff Kutusoff, prince Smolensky), Russian field-marshal, born 1745, entered the army, 1759, served in Poland from 1764 till 1769, and afterwards against the Turks, under Romanzoff. He stormed the fortress Shumla, and, at a later period, contributed greatly to the subjugation of the rebel Pugatscheff. In 1788, he was present at the siege of Oczakow, having been appointed governor-general of the Crimea the year before. At the siege of Oczakow, he was wounded near the right eye. He assisted the prince of Coburg to gain the victory of Fockschani, and, in the memorable conflict of Rinnik, Dec. 31, 1789, he performed miracles of bravery. After the storming of Ismail, under Suwaroff, he was advanced to the rank of lieutenant-general, and, in the negotiations with Turkey, which took place shortly after, he gained the fame of an able diplomatist. In 1793, he was appointed ambassador at Constantinople, and, in the subsequent Polish war, we find him in the Russian army, under Suwaroff. He was particularly conspicuous during the memorable day of Praga. (q. v.) After the restoration of peace, Kutusoff was first appointed commander-in-chief of Finland; Paul afterwards named him governor-general of Lithuania. He re-

sided several years at Wilna, and endeavored to retrieve, by study, the deficiencies of his early education. For a short time, he filled the situation of ambassador to Berlin, but soon returned to Wilna, to his governor-generalship. After this, he was appointed chief of the corps of cadets, and, in 1801, governor-general of St. Petersburg. In 1805, when he was at the age of 60, the emperor Alexander gave him the chief command of the first Russian corps against the French. He led it towards the Inn, but did not arrive there until after the capitulation of Ulm, upon which he united himself with the small Austrian corps of general Kienmayer, and checked the whole of the French army. On the right bank of the Danube, to which he had crossed over, he was closely pursued by the French, and had several engagements with them, especially that near Dürnstein, where he encountered marshal Mortier, on the 18th and 19th November, the issue of which contest was fortunate for him. The emperor of Germany sent him, on this occasion, the grand cross of the order of Maria Theresa. Hereupon, having joined the other Russian corps, he commanded the allied army, under Alexander, at Austerlitz, where he was wounded. In the Turkish war, he received orders from Alexander to close the campaign on the Danube. This being done, Kutusoff returned to Russia, and, when Barclay de Tolly resigned the command, after the first retrograde movement, he received, at the age of 70, the chief command of the Russian army, in the war of 1812. After the battle of Mosaïsk, he adopted a new plan of warfare. (See *Russian-German War*.) To commemorate his victories, he received from Alexander the surname of *Smolenskoï*. Foreseeing the fate which awaited the retreating enemy on the banks of the Berezina, he pursued but slowly, and the campaign was already at an end, when he reached Wilna, where he received his emperor. This campaign had exhausted Kutusoff's strength. He was not in favor of a continuation of the war; for to him, a man beyond 70 years of age, it appeared too bold an enterprise to attack the enemy in the seat of his power. After having issued the celebrated Russian proclamation from Kalisch, he died at Buntzlau,

April 28, 1813. After the death of his widow, the emperor continued the pension of 86,000 roubles annually to her five daughters.

KUYP, or CUYP, Albert, a painter of great originality and merit, was born at Dort, in 1656. He was the son of an able landscape painter, whom, however, he far exceeded, and became one of the most agreeable artists that ever lived. He particularly excelled in the purity and brilliancy of light; and he was not surpassed, even by Claude or any other painter, in an accurate representation of the atmosphere, and of the lightsome effects of sunshine. The works of this artist, of whose life very little is known, embellish some of the finest collections in England; and as they are very highly finished, that circumstance, added to the number of them, implies a long life. The gallery of the marquis of Stafford, in particular, contains some highly valued pictures by Kuyp.

KYAU, Frederic William, baron of; remarkable as a man who owed his success to his wit. Kyau was born in 1654, and, when 17 years old, entered the Brandenburg army, in which he rose, after ten years, to the rank of ensign. Some imprudences obliged him to leave Brandenburg. He went to Saxony, where the elector, and king of Poland, Augustus II, became acquainted with his humor, took him into favor, made him his aid-de-camp, and, at length, adjutant-general and commandant of Königstein (q. v.), which he always used to call his *stone wife*. He remained faithful to her until his death, in 1733. He was an honest man, hating all flattery. He was a real scourge of the court nobility. There are two biographies of this man, whose memory is still popular in the north of Germany, and of whom a thousand sayings are afloat among the people.

KYRLE, John; surnamed by Pope the *man of Ross*; an English gentleman, who possessed an estate of £500 a year, at Ross, in Herefordshire, where he died in 1754, at the age of 90. Doctor Warton, in his *Essay on the Writings and Genius of Pope*, says Kyrle was the Howard of his age, and that he deserved to be celebrated beyond any of the heroes of Pindar. The splendid eulogium of the poet on the man of Ross is well known.

L.

L, in the English alphabet; the twelfth letter and the eighth consonant; one of those called *liquids*, or *semi-vowels*, because, like vowels, they may be pronounced for any length of time, which is not the case with the other consonants, called *mutes*, as, for instance, *p, c*. The sound represented by *l* is produced by placing the end of the tongue against the fore part of the roof of the mouth, opening the jaws, and gently breathing out the air, which thus escapes from the corners of the mouth. The pronunciation of *l*, therefore, is not dependent upon the teeth; yet there are individuals, and even whole tribes, who do not pronounce it; the former in consequence of some defect in their tongue; the latter, because they always use *r* instead of *l*, whilst others always use *l* instead of *r*. It must be observed, that the rolling *r* is different from the *l* only in this, that the former is pronounced with a vibration of the tongue. Hence the constant interchange of *r* and *l*, in many languages, which it is important for the etymologist to observe. Thus the French *orme*, from the Latin *ulmus*; from the Latin *peregrinus*, the Italian *pelegrino*, the French *pelerin*, the German and English *pilgrim*. Of the German word *kirche* (Scotch, *kirk*), the Swiss make *kilche*. The much more frequent change, we presume, is from the *r* to the *l*, as from the more difficult to the easier, yet not always. Thus the lower classes in Rome say, instead of *republica*, *repubblica*. How frequent the change of λ and ρ is, in Greek, particularly in the Ionian dialect, every philologist knows. In Greek, the letter was called *lambda*, analogous to the *lamed* of the Phenicians and the Hebrews. It is remarkable, that, in all these alphabets, and in the Celtic ones, *l* is always composed, in some way, of two straight lines. We find, in the most ancient Greek alphabets, the *lambda* thus, \surd , \wedge , \vee ; in the Etruscan alphabet, \triangleright ; in the Celtic, \langle , \surd . The Greek is \wedge ; the Latin, *L*; the Hebrew, \aleph ; in short, two straight lines always form this letter. In Spanish, *ll* are

pronounced liquid, like the Italian *gl* before *i*; and it is peculiar to this language, that it begins words with this sound, as, *llaneros*. In Portuguese, the same sound is expressed by *lh*. The French *ll*, if preceded by *ai, ei, oui*, is liquid (*mouillée*), which, in most parts of France, is pronounced like the Italian *gl* in *egli*; but the Parisian pronunciation, originally a mere provincialism, is almost like our *y* in *you*, as in *travailler, veiller*; and probably this pronunciation will finally prevail, though it is arbitrary, and against the practice of the majority of the people. In Polish, *l* before *t* is sounded by thrusting the tongue between the teeth. The Polish has also the common *l*, and another with a somewhat guttural sound, produced by pressing the tongue against the roof of the mouth, farther back than in the case of the common *l*. For the latter it has a proper sign. In English, *l* is not pronounced at all in some monosyllables, where it intervenes between a vowel and a subsequent consonant, as in *calm, half, balk, chalk, would, could, folks*.—As a numeral, *L* signified, in Hebrew, 30; in Greek, $\lambda = 11$, and $\lambda = 30,000$. *L*, in Latin, signifies 50; hence two *Ls*, put upon each other, forming $\sqsubset = 100$, which, being rounded, became *C*, = 100. \wedge , on Greek coins, means *Locris, Laconia, Lampsacus, Lacedaemonia*, &c.; on Roman coins, it means *Lucius, Lepidus, libertas, libra, ludos, libens*, &c. *L*, with a dash over it, meant, among the Romans, 50,000. *L*, on French coins, signifies the mint of Bayonne. On Dutch cloths, *L* signifies *Leyden*. On French hats, *L* means *lavne* (made of wool only). *L. A. Q. M.* is an abbreviation for *literarum artiumque magister*; \pounds , the English abbreviation for *pound* (sterling), from *libra*, the Latin for *pound*. In citations, *l* is often used for *book* (*liber*). (See *Abbreviations*.)

LA, in music; the syllable by which Guido denotes the last sound of each hexachord. If it begins in *C*, it answers to our *A*; if in *G*, to *E*; and if in *F*, to *D*.

LAALAND, or LALAND; an island of Denmark, at the entrance into the Baltic from the Greater Belt, about 60 miles in length, and 12 in its mean breadth, and reckoned the most fertile spot in the Danish dominions. This island produces plenty of all sorts of grain, particularly very fine wheat, and excellent peas. It is also famous for a kind of red fruit, called *manna*. The country lies low, the soil is damp, and the air is very unhealthy. Of all the inhabitants of this island, the clergy are the best provided for, according to their rank. The nobility are numerous here, and many of them have very fine seats, and considerable estates. Naskow is the capital. Population, 38,000; square miles, 459. Laaland, united with Falster, forms a bishopric. Lon. $10^{\circ} 59'$ to $11^{\circ} 52'$ E.; lat. $54^{\circ} 40'$ to 55° N.

LAAR, or LAER, Peter van, surnamed *il Bamboccio*, a painter, born in 1613, at Laaren, a village near Naarden, in Holland, enjoyed, during 16 years, the society of the most distinguished artists, viz. Poussin, Claude Gelée (Lorraine), Sandrart, &c., and had considerable influence on the taste of the Italians. In 1673 or 1674, he put an end to his life, probably from hypochondria. He received his surname during his residence at Rome, according to some, on account of his deformity; according to others, from his humorous representations of objects of common life, which he brought into favor. Even in his earliest youth, it was his constant occupation to draw every thing which he met with. His memory served him so admirably, that he could represent objects most strikingly, which he had only seen once, or a long time previous. He was also one of the greatest musicians of his time. He only attempted minor objects, such as fairs, children's games, hunting scenes, landscapes, &c., but his paintings possess great power and animation. The museum of Paris possessed several of his pieces.

LABARRE, John Francis Lefèvre, chevalier de, grandson of a lieutenant-general in the French service, was one of the latest victims of religious fanaticism in France. His father having spent his fortune, his aunt, the abbess De Villancourt, took charge of his education, and the youth made much progress in his studies. The command of a company of cavalry had been promised to him, when the following horrible event put a stop to his career. In the year 1765, a wooden crucifix, on the bridge of Abbeville, had been defaced, and the bishop of Amiens,

De la Motte d'Orléans, issued a proclamation, demanding a disclosure of the perpetrators of the crime, under penalty of ecclesiastical censures and excommunication. Duval de Saucourt, counsellor of the presidial of Abbeville, the private enemy of the abbess De Villancourt, accused the chevalier De Labarre of the crime. Several witnesses were heard. Labarre and Détallonde, a youth of the same age, were ordered to be arrested. The latter fled, and entered the service of Prussia, in which he distinguished himself; but Labarre was apprehended and brought to trial. The indictment charged him with having passed a procession without taking off his hat, of having spoken against the eucharist, and of having sung impious and licentious songs. The tribunal sentenced the young man to have his tongue cut out, his right hand cut off, and to be burnt alive. A decree of the parliament of Paris, of June 5, 1766, passed by a small majority, commuted the sentence into decapitation before burning. This decree was executed July 1. Labarre, hardly 19 years old, was carried to the place of execution in a cart, with the words *impious, blasphemous, sacrilegious, abominable, and execrable*, written on his breast. Voltaire exerted himself as zealously against this infamous act as he had against the execution of Calas. (q. v.) Under the name of M. De Casen, advocate of the royal council, he published a Relation of the Death of the Chevalier De Labarre, which may be found in vol. xxxvi of his works, ed. Beaumarchais. "A Dominican," he says, "was appointed to attend him as confessor, a friend of his aunt, the abbess, with whom he had often supped in the convent. This good man wept, and the chevalier comforted him. Dinner was brought to them; but the Dominican was unable to eat. 'Let us take a little food,' said the chevalier to him; 'you will need strength to support the spectacle which I am going to exhibit.'" He ascended the scaffold with calmness, without complaints, without anger, and without ostentation, merely saying to the monk who assisted him, "I did not think that a young nobleman could be put to death for such a trifle."

LABARUM; the name given to the imperial banner, upon which Constantine, after his conversion, blazoned the monogram of Christ. Eusebius has described it with much particularity. After the vision, in which the luminous cross was exhibited to the emperor, and while he was yet meditating on the meaning of that apparition,

tion, a sudden night came on, "at which time," as he said, "the Christ of God appeared to him, when asleep, with that sign which had been shown him in the heaven, and ordered him to get a standard made, in imitation of that which he had seen in the heaven, which he should use as a protection in his engagements with his enemies. As soon as it was day, he arose, and declared the whole secret to his friends. Then he called together the workers in gold and precious stones, in the midst of whom he himself sate, and gave them a description of that standard, and ordered them to express its likeness in gold and precious stones, which standard we ourselves, also, happened some time to have a sight of."

LABAT, Jean Baptiste, a Dominican missionary and traveller, born at Paris in 1663, took the vows at the age of 19. He afterwards taught mathematics and philosophy at Nancy, where, at the same time, he performed the duties of a preacher. In 1693, he returned to Paris, to the Dominican convent in the street St. Honoré. A letter arriving shortly after, from the superior of the Dominicans in the French Antilles, in which this ecclesiastic urged his brethren in Europe to come to his aid, an infectious disease having carried off many of the members of the order, Labat determined to carry into execution the plan he had long entertained of becoming a missionary. As the superiors of the order expected great benefit from his services in France, it was with difficulty that he succeeded in carrying his intention into effect. He embarked, with several brethren of the order, at Rochelle, in 1693, landed at Martinique in 1694, and immediately undertook the care of the parish of Macouba, which he superintended for two years, after which he was sent to Guadeloupe, for the purpose of building a mill, on an estate belonging to the order. His mathematical knowledge recommended him to the governor there, whom he accompanied during a tour through the island, to assist him in selecting the points best adapted for works of defence. On his return to Martinique, Labat found his cure occupied by another, and he received the office of *procureur-général* of the mission, in which an opportunity was afforded him of displaying the whole extent of his useful activity, at the same time that he served the government by his mathematical knowledge. During several voyages in the service of the mission, he visited all the Antilles, and, on the attack of Guadeloupe by the English, in

1703, he rendered his countrymen important services as an engineer. In 1705, he was sent to Europe on business of the order, and, landing at Cadiz, he embraced the opportunity to survey, geometrically and scientifically, the environs and the whole coast of Andalusia, as far as Gibraltar. He likewise went to Italy, and finally returned to Paris in 1716, where he occupied himself with the publication of a part of his works, and where he died Jan. 6, 1738. His *Voyage aux Iles de l'Amérique*, of which several editions have appeared, and which has been translated into several languages, contains an account of the natural history, particularly of some of the smaller and less frequented islands; of their productions; the origin, customs, religion and governments of the inhabitants, as well as the chief political events which occurred during the author's residence there. He also published a Description of the Countries on the Senegal, and between Cape Blanco and Sierra Leone; Travels in Spain and Italy; and a translation of Cavazzi's work on Western Æthiopia. Besides these, Labat edited the Voyage of the Chevalier Demarchais to Guinea and to Cayenne, and the Memoirs of the Chevalier d'Arvieux, containing his Travels in Palestine, Syria and Barbary.

LABÉ, Louisa, known by the name of *la belle cordière*, was born at Lyons, in 1526 or 1527. Her father had her instructed in music, in several languages, and also in riding and military exercises. This excited in her a desire to enter the army, and, in 1543, she served at the siege of Perpignan, under the assumed name of *captain Loys*. She was commended for her strength and courage. The French being obliged to abandon the siege of Perpignan, Louisa renounced the military service, and devoted herself to literature and poetry. She married a rich rope-maker, Ennemond Perrin, by which means she acquired an opportunity to follow freely her bent for literature. With many agreeable accomplishments, she combined a knowledge of the Greek, Latin, Spanish and Italian. Her house became the resort of men of learning, rank and wit. She excited the admiration of the poets, but at the same time the envy of the ladies of Lyons. Some contemporary writers have praised her for her virtue, while others have accused her of licentiousness. Several of her poetical effusions, particularly the 18th sonnet, certainly afford cause for suspecting her virtue. She appears to have passed through

all the degrees of love: commencing with faithful affection, she became a coquette, and finally an *intriguante*. We may find some excuse for her conduct in the character of the age, when gallantry was not considered dishonorable, and she herself was surrounded by a crowd of amiable but licentious admirers. Her generosity, her taste for learning, and her acquirements, so extraordinary for the times, effaced this stain in the eyes of most of her contemporaries. The tribute which contemporary authors pay her, and the circumstance that the street in Lyons, where her house was situated, was named after her, prove how much she was esteemed. The charm of her conversation, her accomplishments, her talents, the verses which she composed and sung to the lute, contributed to fascinate her numerous and distinguished admirers. Her works are, Epistle to Clemence de Bourges (written with great talent); the Dispute between Love and Folly, in prose (full of interest and originality); three elegies; 24 sonnets, the first of which is in Italian. The first edition of her works appeared in 1555.

LABIALS are letters chiefly pronounced by the lips, as *b, p, f, m*.

LABOR, in physiology, is the act by which a female of the genus *mammalia* brings one of her own species into the world. When the fœtus has remained its due time in the womb, and is in a condition to carry on a separate existence, it is extruded from its place of confinement, in order to live the life which belongs to its species, independently of the mother. The womb having reached its maximum of growth with the increasing size of the fœtus, its peculiar irritability excites in it the power of contraction; it thereby narrows the space within, and pushes out the mature fœtus. The period of gestation is very different in different animals, but, in each particular species, it is fixed with much precision. In the womb, the corporeal frame of man commences existence as an embryo, after further development, appears as a fœtus, then as an immature, and, finally, a mature child. With its growth and increasing size, the membranes which envelope it enlarge, the womb also expanding to give room for it. At the end of the 39th or the beginning of the 40th week, the child has reached its perfect state, and is capable of living separate from the mother; hence follows, in course, its separation from her, i. e. the *birth*. Contractions of the womb gradually come on, which are called, from the painful sensa-

tions accompanying them, *labor-pains*. These are of two kinds: first, the preliminary pangs, which begin the labor, do not last long, are not violent, and produce the feeling of a disagreeable straining or pressure. When the pregnant female is attacked by these, she is often unable to move from her place till the pang is over, after which she is often free from pain for some hours. Then follow the true labor-pains; these always last longer, return sooner, and are more violent. The contractions of the womb take place in the same order as the enlargement had previously done, the upper part of it first contracting, while the mouth of the womb enlarges, and grows thin, and the vagina becomes loose and distensible. By this means the fœtus, as the space within the womb is gradually narrowed, descends with a turning motion towards the opening; the fluid contained in the membranes enveloping the fetus, as the part making the greatest resistance, is forced out, and forms a bladder, which contributes much to the gradual enlargement of the opening of the womb. It is therefore injurious to the delivery if hasty or ignorant midwives break the membranes too soon. By repeated and violent throes, the membranes at length burst, and discharge their contents, and, some time after, the head of the child appears. As the skull-bones have not yet acquired their perfect form and substance, but are attached at the crown of the head only by a strong membrane, and may be brought nearer together, the head, by the pressure which it undergoes, may be somewhat diminished in size, and squeezed into a more oblong form, so as to pass through the opening of the matrix and the pelvis, in which it is contained, and, finally, through the external parts of generation; and when this is done, the rest of the body soon follows. The act of birth or delivery is accordingly, in general, not an unnatural, dangerous, and diseased state of the system, as many timid women imagine. It is a natural process of development, which is no more a disease than the cutting of the teeth, or the coming on of puberty, although, like them, it may give rise to important changes in the body, and to various diseases. It is true, that the process of child-birth requires a violent exertion of nature, but this is facilitated by many preparatives and helps adapted to the purpose. If the birth succeeds in the way described, it is called a *natural birth*. For this, it is requisite that the pelvis should be properly formed, and that the opening should

permit a free passage to the perfect fœtus; that the growth and size of the fœtus should be proportioned to the pelvis, especially that the head should have the size designed by nature, proportioned to the diameter of the pelvis; also, that there should be a proper situation of the womb, in regard to the axis of the pelvis, and a proper position of the fœtus, namely, the head down, the back of the head in front, and towards the opening of the womb, so as to appear first at birth; and, finally, that the external parts of generation should be in a natural state. An easy birth takes place without any excessive strainings, and in due season. A difficult birth proceeds naturally, but is joined with great efforts and pangs, and occupies a long time—over six or eight hours. The cause of it is sometimes the stiffness of the fibres of the mother, her advanced years, the disproportionate size of the child's head, and various other causes. Nature, however, finishes even these births; and women in labor ought not to be immediately dejected and impatient, on account of these difficulties. An *unnatural* (or properly an *irregular*) birth is one in which one or more of the above-mentioned requisites to a natural birth are wanting. An *artificial* birth is that which is accomplished by the help of art, with instruments or the hands of the midwife. *Premature* birth is one which happens some weeks before the usual time, namely, after the seventh, and before the end of the ninth month. Though nature has assigned the period of 40 weeks for the full maturing of the fœtus, it sometimes attains, some weeks before this period has elapsed, such a growth that it may be preserved alive, in some cases, after its separation from the mother. That it has not reached its mature state is determined by various indications. Such a child, for instance, does not cry like full grown infants, but only utters a faint sound, sleeps constantly, and must be kept constantly warm, otherwise its hands and feet immediately become chilled. Besides this, in a premature child—more or less, according as it is more or less premature—the skin over the whole body is red, often, indeed, blue, covered with a fine, long, woolly hair, especially on the sides of the face, and on the back; the fontanel of the head is large, the skull-bones easily moved; the face looks old and wrinkled; the eyes are generally closed; the nails on the fingers and toes, short, tender and soft, hardly a line in length; the weight of such a child is un-

der six, often under five pounds. The birth is called *untimely* when the fœtus is separated from the womb before the seventh month. Such children can rarely be kept alive; there are instances, however, of five months' children living. A curious remark is found in good writers, that a seven months' child is more likely to live than one born a month later. *Late* birth is a birth after the usual period of 40 weeks. As this reckoning of the time from pregnancy to birth is founded, for the most part, solely on the evidence of the mother, there is much room for mistake or deception. The question is one of much interest in medical jurisprudence, as the inquiry often arises whether a child, born more than 40 weeks after the death of the reputed father, is to be considered legitimate or not. The importance of the question and the uncertainty of the proof have occasioned a great variety of opinions among medical writers. Most of them doubt the truth of the mother's assertions about such a delayed birth, and give, as their reason, that nature confines herself to the fixed period of pregnancy; that grief, sickness, &c., cannot hinder the growth of the fœtus, &c. Others maintain, on the contrary, that nature binds herself to no fixed rules; that various causes may delay the growth of the child, &c. Abortion and miscarriage take place when a fœtus is brought forth so immature that it cannot live. They happen from the beginning of pregnancy to the seventh month, but most frequently in the third month. The occasions especially, in those of a susceptible or sanguine temperament, are violent shocks of body or mind by blows, falling, dancing, cramp, passion, &c.

LABOR, AND LABORERS. The two great sources of income, in all communities, are labor and capital. The means of production are the land, utensils, stock, and all which constitutes capital, and the laborers who use this capital. In this general division of the means of production, the term *labor* is used in its broadest sense; for the labor of the mind, or that of the artist, which depends more upon skill than muscular exertion, is to be included in the general estimate of the productive power, if a price or market value is put upon its products in the general estimate. Nor should we, in estimating the general productive capacity, confine ourselves to the species of labor which results in the production of articles of necessity or convenience merely; since, in the products consumed by any community, it is not practi-

cable to draw a distinction between articles of mere utility and those of taste; utility and luxury being combined in a great part of the things used or consumed by a people, whatever may be its stage of civilization and refinement. The land and the greater part of the utensils of production, are estimated, it is true, in a great degree, and, in many instances, wholly, by their mere utility for production. But it is otherwise with respect to the products intended, not merely as the means of producing others, but as ultimate objects of use or consumption. Dwellings, furniture, clothing, food, all combine, in different degrees and proportions, both luxury and utility. The quantity of wool and cotton worn and used by two persons in different ranks of life, and of different means of consumption, may be the same, and answer equally well as a protection of the person against the climate; and yet that used by one, owing to the better quality of the material, and the greater labor bestowed in fabricating it, may cost three or ten times as much as that used by the other; and yet something is paid to taste and luxury even by this latter. The abstract utility of any article is of difficult estimation, and, though it is a proper subject of inquiry and speculation, still, in estimating the productive power of labor, in comparison with capital, the more practical rule seems to be, to take the estimate put upon it by the community itself. If, for instance, the labor of a sculptor is, in the estimation of a community, worth that of 20 day-laborers, the distribution of the annual products of the labor and capital of that community will be governed by this rule of comparison, and the sculptor will be able to consume as much in value as the 20 common laborers. Hence the proportion of the income of labor and capital will vary in different communities, according to the different arts or kinds of production encouraged. To take the same examples, though the labor of a sculptor may be equal in value, as estimated by a community, to that of 20 laborers,—and the same may be equally true of the painter,—yet the capital or stock required for each of these 20 laborers may be, and, if they are employed in agriculture, will be, greater than is required for either of those artists. The proportion, then, of the value of the whole capital of a community, to that of the whole estimated annual value of the labor of all sorts, performed by its members, will depend upon the kind of arts pursued, so that the proportions will not be uni-

form in different communities. The estimated annual market value of the labor, will, however, in any community, be greater, in proportion to its capital, than it would at first view appear to be. It has been estimated to be nearly one fifth, exceeding or falling short of that ratio, according to the circumstances and pursuits of a community; that is, supposing the capital to be stationary, the value of the whole capital, including lands, buildings, animals, furniture, utensils, and every vendible thing whatsoever, is consumed and re-produced every five years. It is evident, then, what a rapid change may be made in the wealth of a community, either for the better or the worse, by an impulse or check to its industry, or a general tendency to economy or prodigality in consumption. The arts, and employments, and habits of a people, then, are every thing, in respect to their prosperity; and the actual amount of their present capital is of less importance, since, if it be too small, that is, if the people are in want of a sufficient stock to employ themselves to the greatest advantage, industry and economy may very soon supply the deficiency. The aggregate annual products of the same labor and capital are greater in one country than another. This is a distinction of great importance, which is overlooked in some economical speculations, or which, at least, has not always its just weight. The fact is, perhaps, too obvious to need proof or illustration. If, for instance, the people of one country have better lands, domestic animals, roads, utensils, or are more skilful and ingenious than those of another, the same amount of manual labor bestowed upon corresponding materials, with corresponding instruments of production, will produce greater results. The wages of labor, and the interest of money, may both, therefore, be higher in one country than in another. This we know to be a fact. In the U. States, for instance, the interest of money, and the wages of common labor, are both higher than in European countries. It does not follow, then, that, if the condition of the mere laborer is better in one country than in another, that of the capitalist will necessarily be worse. To ascertain the condition of these two classes, possessing the productive capacity and means of a community, we first inquire into the aggregate productiveness of capital and industry, and next into the distribution of the aggregate products between the two classes. And, in examining into the condition of the members of a community,

the next inquiry relates to the proportionate share of each industrious class in the whole portion of the aggregate products allotted to industry, as distinguished from that which is allotted to capital. This distribution among the laboring classes themselves, of the products of their labor, will, of course, depend upon the estimation in which the various kinds of labor are held; and its effect on their condition will also depend very materially upon the arrangements, improvements and facilities possessed by the community, to render their labor effective; for the compensation to laborers, individually, may be small, and yet the expense of the whole class of the community to which they belong, very great. To take a familiar instance, if, from the thinness of the population, or other cause, the receivers and distributors of the articles of production and consumption among the people, that is, the retail dealers, can transact but a small amount of business each, though the earnings of each one may be small, their aggregate compensation must be large. In countries half civilized, and in which the arrangements and facilities for exchanges are rude and imperfect, the usual profits of trade are at an enormous rate per cent.; and yet the wealth of these traders will be very trifling, in comparison with that of the merchants and traders of a more civilized, improved and populous community, though the per centage of profit of these latter may be much lower. The same distinction will hold good in respect to every other pursuit and employment in a community,—the proportion of the whole products awarded to any one class, may not correspond, at all, to the individual advantage or disadvantage of the members of that class, in their pursuits, in comparison with that of those of any other class. The compensation of any one class of a community, in comparison to any other, will evidently depend upon the course taken by the taste and luxury of the community; for we may assume it as a general doctrine, that when the taste and passions of a community lead to a large consumption of the articles produced by any class, or if the services of its members are considered particularly beneficial, these members will be liberally compensated. If, for instance, as is, or, at least, has been, the fact in some countries, the inhabitants suppose that their future welfare does not depend so much upon their own characters and conduct as upon the prayers and good offices of their spiritual guides, they will deem it

impossible to reward these spiritual guides too liberally, seeing they have the salvation of the rest at their disposal. The same principle will hold true in respect to any other class: in proportion as its employment goes along with the tastes and passions of the community, will its members be rewarded for their labors. The effect will not, however, necessarily extend itself to all the members of the class. Suppose, for example, that the taste and vanity of a people appear very much in their apparel and personal ornaments: it will not follow that all cloth makers, tailors, jewellers, hatters and shoe-makers will have the highest wages in the community; but the result will be, that a high price will be paid for excellence of material or superiority of skill in the manufacture of those articles. The moment, therefore, in which civilization commences,—and some degree of it is coeval with the existence of every society,—excellence in some arts or employments will meet with extraordinary rewards. As arts and civilization advance, the objects of passion and taste will be multiplied, and with them the kinds and varieties of excellence of materials or skill, which will be esteemed of extraordinary value. The effect necessarily is to produce a comparative depression in the value of all ordinary products and unskilful labor. Accordingly, the ordinary laborers, in all the arts, become by degrees a distinct class. In a refined community, abounding in arts, this class necessarily becomes numerous, and the condition of its members is a subject of solicitude to the philanthropist, and of interest to the economist and statesman. The security and welfare of the whole community, will depend very materially upon the character and condition of this part of the population. The greater the distance between this class and the rest, the more effectually they are set off from the others, the more unnatural and distorted will be the state of society, and the more frequent will be scenes of disorder, distress and vice. It is one of the first and most important maxims of policy and of economy, then, to sustain the members of this class, not by giving them the control and management of affairs, for which, of course, they are not the best fitted,—but by using all possible means, whether by legislation or social influence, to give them education, good habits and good morals; to inspire and maintain in them a respect for themselves, and secure to them the respect of others.

LABOR-SAVING MACHINES. Montes-

quieu somewhere regrets the introduction of the use of water-mills for grinding corn, instead of the hand-mills formerly in use, as it threw a great many laborers out of employment, besides diverting the water from the purposes of irrigation. Upon this principle of throwing laborers out of employment, the English weavers were opposed to the use of power-loom. It is not remarkable that laborers themselves, who, for a time, feel the inconveniences of the introduction of any improvement, should oppose its introduction; but it is singular that any man of enlarged and philosophical views should fall into such a notion. Nobody certainly would think it a misfortune to a community, that, in consequence of some improvement in agriculture, the same labor would produce a greater quantity of grain; on the contrary, every one consents to the praise bestowed, by Johnson, upon the man who makes two blades of grass grow where only one grew before. And an improvement in machinery, whereby the same labor will produce twice the quantity of cloth, is precisely the same in its general effects upon the condition of the community, as an improvement in agriculture. But in a case of improvement in machinery, the effect is more apparent and more sudden, as it will spread rapidly, and, accordingly, the inconvenience to the laborers is, in fact, greater, though it can last only for a time. However, the circumstance that its effect in discharging laborers is only temporary, though it shows that the inconvenience to the community is very limited, while its advantages are permanent, yet affords no great consolation to the laborers themselves, if the population is dense, and employment difficult to be obtained, since, while this temporary effect is passing off, they may starve. To avoid producing distress, and consequent disorder, labor-saving machinery, therefore, should be introduced gradually among a community of laborers, like those of England, to whom it is ordinarily difficult to find full employment, and who, if unemployed, are immediately reduced to distress. Hitherto (1831) no inconvenience has been experienced in the U. States, in consequence of the introduction of improvements in machinery, since it is, as yet, the more general habit of all classes to save something, so that very few are reduced to immediate distress, though thrown out of employment; and there is usually less difficulty in obtaining full employment for the industrious classes than in most other countries; and, accordingly, all

classes are in favor of improvements and inventions whereby labor may be saved, or its products augmented.

LABORATORY (*laboratorium*); a place fitted up for the researches of the chemist. It bears the same relation to the science of chemistry as an observatory does to that of astronomy. Although the simple observation of nature is sufficient to teach us the properties of numerous compounds, and to enable us to develop, in part, those forces which produce chemical changes, still the science of chemistry must ever have remained exceedingly defective in facts, and faulty in theory, but for the light derived from experiment. It is by means of artificial fixtures and processes, that the chemist obtains the elements in a state of freedom, and recombines them so as to produce, in many instances, not only their original compounds, but such as are altogether new. It is no exaggeration to say, that nine tenths of the facts of the science, and a majority of the arts depending upon it, have been derived from the laboratory. The constructions which first received this name consisted of under-ground apartments, secluded from light and wholesome air of day—a situation it is impossible to account for, except upon the idea that it was copied from the alchemists, who are known to have preferred such places for the purpose of secrecy. The inconveniences attending these situations, from the want of light and facilities for ventilation, as well as from the prevalence of moisture, caused them gradually to be exchanged for apartments above ground; and although, for a time, an unnecessarily gloomy and mysterious aspect was imparted to them, from their being built of stone or brick, and but imperfectly lighted, they have at length come to resemble, in their general appearance, other structures intended for the cultivation of science. Besides laboratories intended for scientific research, there are those which are devoted to articles of chemical manufacture, as the alkaline, earthy and metallic salts, pigments, &c.; but as these possess considerable diversity in their construction, according to the kinds of manufacture for which they are employed, and cannot well be conceived of without the aid of drawings, we shall omit their description, and confine the present article to a very general account of a laboratory fitted up for the researches of one or two philosophical chemists, in connexion with a theatre, or lecture room, for the public illustration of the science.

A building wholly devoted to this purpose, should be but one story in height, in order to facilitate access to the apartments, and to render more easy the bringing in of heavy articles, as wood, water, coals, and carbons, and, at the same time, to allow of openings in the roof for sky-lights and for ventilation. In some laboratories, the theatre and working-room are united in the same apartment; in others, they are separated by a partition. The advantage of the former construction is, that the furnace operations before a class are rendered more easy; but the disadvantages are, that the size of the room renders it an inconvenient place for private researches, especially in the winter, and the seats are continually subjected to the dust and litter of ordinary operations. We shall treat of a laboratory in which these apartments are distinct. The building may vary in length from 50 to 80 feet, and in breadth from 25 to 50 feet. It should be well pierced with windows laterally, and also with sky-lights and openings in the roof. The lecture-room should occupy two thirds of the length of the building; and the partition which separates it from the working-room and other apartments, must contain the flues that are requisite for the furnaces of the whole establishment: these may be spread over the wall on both sides, and finally be carried out of the roof in one general chimney. The floor, from 8 to 12 feet in advance of this wall, should be paved with stone, or brick; in front of which, and immediately before the seats for the class, a table, with occasional breaks for passages, gasometers, and a pneumatic cistern, should extend quite across the room, from side to side. At the ends of this space, enclosed by the table, cupboards should be erected against the wall, with glass doors, for the reception of the jars of the pneumatic cistern, measures, retorts, flasks, receivers, and the bottles and vials containing the chemicals employed for demonstration. The table should be abundantly provided with drawers of different sizes, in some places extending quite down to the floor, for the reception of substances employed in a course of demonstration, and which it is not necessary to keep in vials and bottles, such as the common metals and many earthy and metallic salts; besides for the numerous tools, as knives, files, gimlets, forceps, and other indispensable articles, as corks, valves or glass plates, stirrers, strings, bladders, tow, matches, sand, tapers, glass, metallic and earthen tubes, stop-cocks, &c., &c. Two or three porta-

ble furnaces, of different sizes and shapes, may have a place near the wall for ordinary furnace operations; and a recess in the wall, centrally placed, and about four feet from the floor (similar in shape to a common fire-place), should be provided, with a strong draft, for those experiments which are attended with dangerous exhalations. The seats may be arranged as is usual in other lecture-rooms. The floor room upon the other side of the partition may be divided, lengthwise of the building, into two apartments, separated by a narrow space-way, one of the rooms having double the dimensions of the other; the larger is the working-room; the smaller, an apartment for receiving delicate articles of apparatus, as balances, electrical machines, air-pump, &c., and which would be liable to injury if exposed to the attacks of the damp and corrosive vapors that are continually floating about in the other rooms. The entry communicates with the theatre by a door; a double door, also, connects the working-room and the lecture-room. The whole floor of the working-room is paved with brick or stone. The first fixture of importance in this room is the general working furnace. Its use is partly domestic, partly chemical; for it is intended to warm and air the place, occasionally to heat water, as well as to supply the means of raising a crucible to ignition, or of affording a high temperature to flasks and evaporating basins, through the agency of a sand-bath. It is built with a table top. The fire-place itself is constructed of brick-work, with iron front and fittings, and the flue, being carried horizontally for three or four feet, is afterwards carried off to, and connected with, the main flue existing in the wall. The fire-place and horizontal flue are covered with a large plate of cast iron, of from two to three feet in width; this is formed, in the middle, over the heated part, into sand-baths; a round, movable one over the fire itself, and a long, fixed one over the flue. The sand-baths supply every gradation of heat, from dull redness, if required, down to a temperature of 100° or lower, whilst on each side of them exists a level surface, which answers every purpose of an ordinary table, and supplies extraordinary facilities to experiments going on in the sand-bath or furnace. This furnace may be advantageously placed directly against the wall which separates the working-room from the theatre. A large, flaring, wooden hood should be suspended over the sand-bath, to receive the fumes evolved during the digestions

and solutions made upon it, and to conduct them away into the chimney. (For a particular description of this furnace, see Faraday, *On Chemical Manipulations*, p. 90.) Near by may be placed another furnace for heating a large copper boiler, intended to supply the laboratory with hot water; the boiler should also be fitted with a head, worm and refrigerator, in order to provide an occasional supply of distilled water. The tables should be as extensive as the room will allow, and be so placed as to admit of ready access; hence a large one, placed towards the middle of the room, and in such a situation as to be well lighted, is very useful. It should be made strong, and furnished with drawers, unless it be closed in with doors, so as to form cupboards. To protect it from corrosive fluids, as acids and alkalis, it should be covered with sheet lead. In a corner, and as much out of the way as possible, a sink of stone, or of strong wood-work lined with lead, must be provided. It must be supplied with water, if possible, from a cistern or aqueduct, since an unlimited supply of water is demanded in a laboratory. A place in its immediate neighborhood is to be appropriated to the cleansing accompaniments of a sink, such as pails, pans, sponges, brooms, brushes, &c. Between the table and the working furnace may be placed the pneumatic cistern, which should be of larger dimensions than that employed in the theatre. If the surface of water be 19 inches by 28, and a well be formed at one end of 14 inches by 10, and 12 inches in depth, so as to leave a continuation of shelf surface, on three sides of the well, of $2\frac{1}{2}$ inches in width, it will be found sufficiently large for almost any purpose. It should have shelf room sufficient to hold several jars of gas at once. It should be filled with water until it is $1\frac{1}{2}$ inch or $1\frac{1}{2}$ inch above the shelf, and should be provided with a stop-cock, by which the water may be drawn off when it has become acidified or dirty. Such a trough is best made of japanned copper, and supported in a wooden frame, so as to stand about 39 inches from the floor; or it may be made of wood, and lined with sheet lead. Unless the establishment is very extensive, one mercurial cistern will answer for both rooms; it may be shaped out of marble or soap-stone, or be made of cast iron, and mounted upon a firm frame, fitted with rollers. Cupboards are very useful; and at least two large ones, with shelves, ought to be provided, in order to preserve chemical preparations,

and the neater sort of apparatus, from the dust and dirt which are constantly moving and settling in the laboratory. All parts of the walls within reach should be fitted up with shelves, in a firm manner, to receive bottles and jars; also a tube-rack should be provided, to hold pieces of glass tube, from one to three feet long. A part of the wall should be furnished with long spikes, to hold retort and flask rings, large bent tubes, siphons, coils of wire, iron tongs for holding flasks, &c. Among other indispensable furniture may be enumerated the following articles: one or two large wooden blocks, to serve as bases on which to put heavy mortars; an anvil, or spike with its foot-block; a vice affixed to a side table; hammers; cold chisels; a screw-driver; saws; cutting chisels; gimlets; brad-awls; half-round, flat, and small three-square files; forceps; a trowel; a soldering-iron, with its appendages; a glue pot; nails; screws; spatulas of silver, ivory, steel and wood; corkscrew; shears; blow-pipes; scratching diamond, &c. A number of filtering stands, supports for retorts and flasks, and wooden forms for holding glass evaporating basins, flasks and receivers, should be provided; also a great variety of common, kitchen, open furnaces. The cellar beneath the working-room should contain the more bulky articles, and such as do not receive injury from a slight degree of moisture, as lutesand, charcoal, bricks, carboys of acid, voltaic troughs, &c. We do not go into a description of the common glass apparatus which is essential to a laboratory, as, Woulfe's and Nooth's apparatus, retorts, adopters, receivers, matrasses, flasks, precipitating glasses, &c., &c., since these articles have come to be well known, under their appropriate names, in every large city where philosophical apparatus is manufactured. Doctor Henry recommends that the painting of that part of the laboratory furniture which is exposed to the action of acids, be done with the sulphate of lead.

Laboratory, in military affairs, signifies that place where all sorts of fireworks are prepared, both for actual service and for experiments, viz. quick-matches, fuzes, port-fire, grape-shot, case-shot, carcasses and grenades, cartridges, shells filled, and fuzes fixed, wads, &c., &c.

LABORDE, Jean Joseph de, a merchant distinguished for activity, enterprise, wealth and benevolence, of an ancient family in Bearn, born in 1724, amassed a large fortune at Bayonne, by commerce with the West Indies and Spain. When,

in 1758, the French court wished to obtain a loan of 50,000,000 of livres from the Spanish court, the latter would not close the transaction without Laborde's guarantee. Upon this, Laborde was made court banker, and the first minister, Choiseul, gave him his entire confidence. After the fall of this statesman, Laborde retired from the greatest part of his business. At the breaking out of the American revolution, he alone was able to furnish the government 12,000,000 livres in gold, at Brest, which enabled the expedition under Rochambeau to set sail. At a later period, Laborde employed his fortune in useful and splendid buildings. The palaces of St. Ouen (since the property of Mons. Ternaux), of St. Leu (afterwards belonging to the duke of Orleans), of La Ferté Vidame (belonging to the duke of Penthièvre), and that at Méréville, near Paris, were built by him, as well as the finest houses in the Chaussée d'Antin, a street of Paris, which, in his time, was a large garden, belonging to his hotel. He devoted 24,000 francs, yearly, to the support of the poor. Towards the erection of four large hospitals, at Paris (1788), he contributed 400,000 francs. With this truly royal beneficence he combined the most delicate manners. He never spoke of the good he had done, nor suffered those whom he had served to feel oppressed by the obligation. Satisfied in the possession of the love and esteem of his fellow citizens, he declined external marks of distinction. Louis XVI raised his estate of Laborde (his family name was *Dort*; his ancestors, who, in 1620, had purchased the small domain Laborde, called themselves *Dort Laborde*) to a marquisate; but he made no use of this title. During the period of terror, Laborde lived in retirement on his estate at Méréville, but, like Malesherbes and Lavoisier, who resembled him in nobleness of character, he fell a sacrifice to the fury of the popular leaders. Gendarmes dragged the venerable old man to the tribunal of blood. His whole commune, consisting of 1200, offered to defend their father and benefactor; but he declined it, and exhorted them to keep the peace. These worthy people sent a deputation to the convention, but in vain; the benefactor of thousands fell, at the age of 70 (April 18, 1794), under the guillotine. His crime was being rich. Laborde had four sons. Three of these served in the navy; two accompanied the unfortunate La Peyrouse. They met their death, before the loss of La Peyrouse's vessel, in an act of

heroism, which this navigator relates in the account of his voyage, and for which he had a monument erected to their memory, at Port Francois, on the coast of California. The oldest of these three, after having retired from the navy, was appointed treasurer, and, in 1789, member of the constituent assembly. His reports on the state of the finances were printed by order of the chamber. He died, 1801, a voluntary exile at London.

LABORDE, Alexander Louis Joseph, count de, the youngest son of the preceding, born 1774, at Paris, entered the Austrian service, where, in consequence of a letter from his father to Joseph II, who entertained great esteem for the old Laborde, and had expressed the wish to see one of his sons in his service, he was appointed lieutenant in the regiment Wenzel-Colloredo, and was afterwards removed to the light-horse regiment Kinsky, as captain. Laborde would willingly have served his country in the French revolutionary war, but his name was on the list of emigrants. At that time, while lying wounded at Heidelberg, he made the acquaintance of general Oudinot (who had been taken prisoner by the regiment Kinsky) and others of his countrymen. This strengthened him in his resolution. As soon as the peace of Campo-Formio was concluded, he left the Austrian service, and obtained the erasure of his name from the list of emigrants. On his return to France, he devoted himself to science, made a journey to England, Holland, Italy and Spain, and, on his return, published his splendid work, *Voyage pittoresque et historique de l'Espagne* (4 vols., fol.); his *Itinéraire de l'Espagne* (5 vols.); his Description of the Collection of Greek Vases belonging to Count Lamberg; his *Voyage pittoresque en Autriche* (2 vols., folio); and the commencement of his work on the monuments of France, in chronological order. He was elected a member of the institute, and Napoleon intrusted him with important business as counsellor of state. He likewise accompanied the emperor to Spain and Austria. In 1814, Laborde commanded a division of the national guard of Paris, and concluded, together with Tourton, in the name of marshal Monecy, the capitulation with the Russians. After the restoration, he made a second journey through England, and, on his return, published the first book in France on the system of mutual instruction. During three years, he was likewise first secretary to the central society for the extension of this method of education.

In 1818, he was again appointed counselor of state, but was soon displaced on suspicion of liberal principles. In 1822, the department of the Seine elected him its representative. In this capacity, he has always opposed the encroaching spirit of the ultras with energy, and sometimes with success. His work on the prisons in Paris effected a material improvement in them. His treatise on the better construction of water-works, sluices, wells and pavements, drew the attention of the authorities to these objects.

LABORING of a ship implies pitching or rolling heavily in a turbulent sea—an effect by which the masts and hull are greatly endangered; because, by the rolling motion, the masts strain upon their shrouds with an effort which increases as the sine of their obliquity; and the continual agitation of the vessel often loosens her joints, and makes her extremely leaky.

LABRADOR; an extensive country of N. America, lying between Hudson's bay, the Atlantic ocean, and Canada, and extending from the 50th to the 60th degree of north latitude, or nearly 700 miles in length, from north to south. It is about 500 miles in breadth, but has never been fully explored, and is little known, the severity of the climate and the barrenness of the region confining the visits of foreigners principally to the coasts. These are bordered by innumerable islands, so close together as to bear the appearance of main land, broken by inlets: this has given rise to much confusion in the charts. The summer is short, but extremely hot, and the winters are very rigorous. Great numbers of fish, of various kinds, particularly cod and salmon, are found on the shores, and in the small rivers. The islets are covered with flocks of sea-fowl, particularly eider ducks. Bears, wolves, foxes, hares, martens, &c., are numerous. The population is small. The natives of the coast are Esquimaux. The tribes of the interior are little known. Labrador belongs to Great Britain, and is annexed to the government of Newfoundland. The Labrador fishery, in 1829, was calculated to employ 2108 vessels, and 24,100 seamen; 600 of the vessels, manned with 9110 men, and producing 678,000 cwt. of fish, and 6730 hhds. of oil, were British; and 1500 vessels, manned with 15,000 men, and producing 1,100,000 cwt. of fish, and 11,000 hhds. of oil, were from the U. States. (See *Fisheries*.)

LABRADORITE, or LABRADOR FELDSPAR. This mineral scarcely differs from feldspar (q. v.) in the properties of its crys-

talline structure, except in having one of its cleavages somewhat less distinct. In hardness, also, it is nearly identical with that species; but its specific gravity is somewhat higher, being 2.75. The remarkable opalescent and iridescent tints which it exhibits, constitute its most striking character. Its ordinary color is a dark gray. Its reflections, which, for variety and intenseness of color, vie with those of the opal, are visible only upon two opposite sides of any crystal or mass. Blue and green colors are the most common; but occasionally these are intermingled with rich flame-colored tints. It is sawed into slabs by the lapidaries, and employed in inlaid work. The finest pieces are very highly esteemed. A square table, composed of two pieces of this stone, and whose dimensions were 13 inches by 20, and 8 lines in thickness, was sold, in Paris, for 1800 francs. The Labradorite is composed of 54.6 silica, 29.0 alumina, 11.8 magnesia, and 4.6 soda. It was first distinguished by the reverend B. Latrobe, among a number of specimens sent to him from Labrador by the Moravian missionaries. It occurs, not only in pebbles on the shore, but in spots in the rocks about Nain, and particularly near a lagoon about 50 or 60 miles inland. Its colors, darting through the limpid crystal of the lake, and flashing from the cliffs, more especially when moistened by a shower of rain, changing continually with every alteration in the position of the spectator, are described as almost realizing a scene in fairy land. Labrador feldspar is also found upon the borders of the gulf of Finland, and at Fredericksvoern, in Norway, and at some other places.

LABYRINTH, with the ancients; a building containing such a number of chambers and galleries, one running into the other, as to make it very difficult to find the way through it. The Egyptian labyrinth, the most famous of all, was situated in Central Egypt, above lake Mæris, not far from Crocodilopolis, in the country now called *Fejoom*. According to some writers, it was built by the Dodecarchs (650 B. C.); according to others, by Psammetichus; according to others, by Ismandes, who is also said to have been buried there. In all probability, it was a sepulchre. The building, half above and half below the ground, was one of the finest in the world, and is reported to have contained 3000 rooms, the arrangement of which seems to have been symbolic of the zodiac and solar system. All these

rooms were encircled by a common wall and by columns; but the passages were so intricate, that no stranger could find the way without a guide. It is said, that, in the lower rooms, the coffins of the builders of this immense fabric, and of the sacred crocodiles, were deposited, and that the upper rooms excelled, in splendor and art, all human works. At present, only 150 rooms are reported to be accessible: the others are dark, and choked with rubbish. Respecting the interior construction and the destination of the labyrinth of Crete we know still less. The ancient writers consider this subterranean cavern to have been built by Dædalus, in imitation of that of Egypt, but on a smaller scale, by order of Minos, who confined there the Minotaur. According to others, it was a temple of the latter. The labyrinth at Clusium was erected by king Porsenna, probably for his own sepulchre. It was a square building of stone, 50 feet in height and 30 on each side. At each corner stood a pyramid, and also one in the centre, each 150 feet high, and at the base, 75 feet wide. These edifices were not built for the purpose of making people lose their way; this was merely an accidental peculiarity, on account of which every confused mass of things, difficult to be disentangled, has been called a *labyrinth*. The same name is also given to a part of the ear. (q. v.)

LAC, LAK, LAAK, and LAK'H, are different ways of spelling the vulgar derivatives from the Sanscrit words *lakshâ* and *laksha*, i. e. one hundred thousand; a name given by the Hindoos to the *coccus lacca* and *gum-lac*, for which they have six different terms; "but they generally call it *laksha*," says sir William Jones (*As. Res.* ii, 364), "from the multitude of small insects which, as they believe, discharge it from their stomachs, and at length destroy the tree on which they form their colonies." The *gum-lac* is probably discharged by the *coccus*, as a defence for its eggs, which are deposited on the bihar tree. Four kinds are known—stick-lac, seed-lac, lump-lac, and shell-lac. The first is the gum before its separation from the twigs, which it incrusts; and the best is of a red purplish color: the second is the gum in a granulated form, stripped from the twigs, and perhaps boiled, by which a portion of the color is lost: the third is the seed-lac, melted into cakes: and the fourth, the common form in which it is known in Europe, is the purified gum. The best is amber-colored and transparent. In the East, it is much used for

trinkets. It is the basis of sealing-wax. It forms varnishes, furnishes a brilliant red dye, and, mixed with thrice its weight of fine sand, is made into polishing stones. (See *Coccus*.) *Lac*, in its original meaning, is applied to the computation of money in the East Indies. Thus a *lak* of rupees is 100,000, which, supposing them to be *sicca*, or standard, equal £12,500.

LACAILLE. (See *Caille*.)

LACCADIVE ISLANDS; a group of small islands in the Indian sea: the nearest is about 120 miles from the coast of Malabar; lon. 71° 15' to 73° 30' E.; lat. 10° to 12° 40' N. These islands are supposed to be what Ptolemy called *Insulæ Numero XIX*; but, in fact, they are 32, all of them small, and covered with trees. They are rocky on their sides, mostly as if laid on a bottom of sand, attended with reefs, and the channels between them very deep. They are commonly visited by English ships, in their way from India to the Persian gulf or Red sea. The principal traffic of the inhabitants is in the produce of the cocoa palm, such as the oil, the cables and cordage prepared from this plant; and in fish, which is dried and sent to the continent of India, from whence they get rice, &c., in return. They also trade to Mascat, in large boats, and bring back, in return for their commodities, dates and coffee. Ambergis is often found floating off these islands. The inhabitants are mostly Mohammedans, called *Moplays*.

LACE is a species of net-work, made of silk, thread, or cotton, upon which, in old times, patterns were embroidered by the needle, after its construction: they are now, for the most part, formed during the knitting itself. The best laces are made at Mechlin, Brussels, Antwerp, Ghent and Valenciennes. In England, Buckinghamshire chiefly furnishes lace knit by hand, which requires much patience and assiduity. The lace made by machinery is largely manufactured at Nottingham. The invention of lace knitting is attributed by Beckmann (ii. 313) to Barbara, wife of Christopher Uttman of St. Annaberg, in 1561. Paulus Jansenius, in his history of that town, states as follows: *Hoc anno (1561), filum album retortum in varias formas Phrygio opere duci cepit*; and there are many other authorities for the name of the workwoman. It may be, however, that she introduced the manufacture, rather than invented it. Lace worked by the needle is of far older date. It is found richly and abundantly in church furniture of great antiquity, and is supposed to have been originally made in

Italy, particularly at Genoa and Venice. The *Opus Phrygianum*, to which allusions are made by Plautus (*Menæchmi*, ii, 3; *Aulularia*, iii, 5), and by Pliny (viii, 74), is considered by Beckmann to have been no more than needle-work; and so the expressions of the latter writer are understood by Holland: "As for embroidery itself, and needle-work, it was the Phrygians' invention, and hereupon embroiderers, in Latine, bee called *Phrygiones*." *Point-lace* is that embroidered by the needle, and, from the great labor required, is therefore most expensive. In the lace knit by hand, as many threads are employed as the pattern and breadth require. These are wound upon the requisite number of bobbins (made of bone, whence the name *bone-lace*), which are thrown over and under each other in various ways, so that the threads twine round pins stuck in the holes of the pattern—a stiff parchment stretched on a cushion or pillow—and by these means produce the openings which give the desired figure. In that made by machinery, the meshes are all formed by a continuation of a single thread. The coarsest is called *Mechlin-net*, the finest, *bobbin-net*, from the employment of bobbins. Lace made by the loom is generally known as *British lace*.

LACÉDÉMON. (See *Sparta*.)

LACÉPÈDE, Bernard Germain Étienne, count Delaville sur Ilion de, naturalist, peer of France, born at Agen, 1756, was, from his youth, passionately attached to natural history and music: he consequently abandoned the military profession, for which he was destined, and devoted himself to the study of natural history. His teachers and friends, Buffon and Daubenton, procured him the important situation of keeper of the collections belonging to the department of natural history in the *jardin des plantes*. At the breaking out of the revolution, he was elected a member of the legislative assembly, and belonged to the moderate party. To withdraw from the storms of the period of terrorism, he resigned his situation, and retired to his country-seat Leuville. He again made his appearance under the directory, and was appointed one of the first members of the institution. Napoleon made Lacépède a member of the conservative senate, and conferred on him the dignity of grand chancellor of the legion of honor. Lacépède became one of the most zealous adherents of the emperor, and, during the 10 years of the imperial reign, few public celebrations occurred at

which he did not appear as an orator. His benevolence and his inattention to his own affairs involved him in debt. Napoleon, therefore, gave him a salary of 40,000 francs. After the first restoration, Lacépède lost his situation of grand chancellor of the legion of honor, but was raised to the peerage by the king. During the hundred days, the emperor appointed him grand master of the university; but he declined this office, and devoted himself solely to the sciences. In 1817, he published a new edition of Buffon's works, and announced, at the same time, that, at the desire of his deceased friend Lagrange, he intended to publish his *Theory on the Formation of Comets*. He likewise published a continuation of the work on the Cetacea, commenced by his great predecessors. His *History of Fishes* (5 volumes, 4to.), is considered his principal work. The complete collection of his works, in which are included two small novels, which appeared anonymously, and the opera *Omphale*, is voluminous. Lacépède could adorn the driest subjects with the graces of a brilliant style. He died Oct. 6, 1825, at his country-seat Epinay, near St. Denis, of the small-pox. Ville-neuve wrote his *Éloge Historique* (Paris, 1826). Of Lacépède's very defective *Histoire Civile et Militaire de l'Europe* (from the end of the fifth, till the middle of the eighteenth century), in 18 volumes, the two first volumes appeared after his death (Paris, 1826).

LACHAISE, François d'Aix de, confessor of Louis XIV, member of the congregation of Jesuits, was born in the *château d'Aix*, in August, 1624. The family D'Aix de Lachaise was one of the most respectable in France, and a grand uncle of François de Lachaise, father Cotton, had been confessor of Henry IV. In the Jesuit college at Rohan, which had been founded by one of his ancestors, Lachaise commenced his course of studies, and finished it at Lyons. He was the provincial of his order, when Louis, on the death of his former confessor, father Ferrier, appointed Lachaise his successor. This appointment occasioned surprise, because, on the one hand, the disputes between the parties of Jansenists, Molinists, &c., divided the court of Louis XIV, already infected, by the example of the king, with a sickly kind of devotion, as also the capital, which fluctuated, in imitation of the court, between licentiousness and bigotry; and, on the other hand, no Jesuit, since father Cotton, had been chosen to this important situation. The new confessor was soon

involved in a web of court intrigues. Mme. de Montespan and Mme. de Maintenon, the Jansenists and Jesuits, stood opposed to each other, and Louis, moved by sensuality and superstition, wavered like a reed between these parties. Nevertheless, Lachaise maintained his ground, although he was equally obnoxious to Mme. de Montespan and Mme. de Maintenon, who frequently expressed their dislike to him in bitter sarcasms. On every occasion—at the famous declaration of the French clergy respecting the liberties of the Gallican church, at the revocation of the edict of Nantes, on occasion of the disputes of the Quietists, at the marriage of Mme. de Maintenon with the king (1686), and similar important events of the time—father Lachaise, in consequence of his office, was more or less forced to play a part; and, although he reflected well on every step he took, he constantly received the severest reproaches from both parties. The most intelligent men, however, never judged unfavorably of his private character and his conduct; and St. Simon, who was no friend to the Jesuits, as well as Voltaire, in his account of the age of Louis XIV, De Boza, Spon, and others, acknowledge, that the confessor of the vainest monarch, and the mediator between the most exasperated parties, knew how to conduct himself, under all circumstances, with address, coolness and sagacity, and that, although a zealous Jesuit, he never allowed himself to be drawn into violent measures against his opponents. That Louis formally married Mme. de Maintenon, Voltaire attributes principally to the counsels of Lachaise; but that this marriage remained secret, and was not publicly acknowledged, according to the desire of that ambitious woman, may likewise be attributed to Lachaise, who, on this account, had constantly to endure her hatred. Lachaise, maintaining his ground in the favor of his monarch till his end, and acting as his counsellor, even when age and weakness had almost converted him into a living skeleton, and weakened his faculties, died January, 1709, at the age of 85. He left philosophical, theological and archæological works. His taste for the study of numismatics, and the great share which he had in the improvement of this branch of science in France, are well known. Louis XIV had a country-house built for him at the end of the present *Boulevard neufs*, which, at that time, owing to its situation on a hill, received the name of *Mont-Louis*. Its extensive garden now forms the cemetery

of *Père Lachaise*, the largest in Paris. (See *Cemetery*.) Many splendid monuments now adorn the place, where, formerly, the courtiers of Louis XIV used frequently to meet, to pay their respects to the confessor of their absolute master. The situation of the burying-place, on the declivity of a hill, affords one of the most delightful views of a principal part of the city and its suburbs. At the approach of the allies, in 1814, this burial-place was fortified, and defended by the students of the polytechnical and veterinary school. The Russians, in storming it, did great injury: the shaded walks, particularly, suffered by the bivouac of the troops, but have since been repaired. A short time previous to the second taking of Paris (1815), viz. from June 24 till July 8, no burials took place in the cemetery of *Père Lachaise*, on account of the troops which surrounded the capital. During this time, the dead were buried in the cemetery of Ste. Marguerite, situated in the town, which had been long out of use.

LACHRYMÆ CHRISTI (*Latin*, tears of Christ); a superior kind of Italian wine, so called, it is said, because it drops like tears from the press, before the grapes are subjected to any pressure except their own weight. It is dark-red, and the grape grows at the foot, and, to a certain height, on the sides, of mount Vesuvius. On several of the Greek islands, also, a kind of wine is produced in the same way.

LACHRYMATORIES (i. e. *tear-bottles*; from *lachryma*, *Latin*, a *tear*); small glass or earthen vessels found in tombs, so called, because they were supposed to have been used by the ancient Romans to collect the tears of the friends of the deceased. Some of them contain the impression of one or of two eyes. They are now considered to have been used for containing aromatic liquids, to be poured upon the funeral pile.

LACLOS, Pierre-François-Choderlos de, author of the famous romance *Les Liaisons dangereuses*, which first appeared in 1782, was born at Amiens, in 1741, and, before the revolution, was a French officer of artillery, and secretary to the duke of Orleans. Laclos was considered, when he was young, as one of the most talented and agreeable, and, in a moral point of view, as one of the most dangerous men. His enemies have maintained that he has drawn his own character in that of the viscount de Valmont, in his romance. Others celebrate the simplicity, honesty and good nature of his character, at least

in the latter part of his life. He was one of the leaders of the Orleans faction, as it was called. Being implicated in the affair of the 5th and 6th of October, he followed the duke of Orleans to London. After the return of the king from Varennes, Laclos endeavored, by means of the Jacobin club, to effect the foundation of a republic, as he conceived that this step would lead eventually to the elevation of the house of Orleans to the French throne. At the breaking out of the war, Laclos was transferred as an assistant to the old Luckner, and, after the fall of the house of Orleans, he disappeared from the stage. It is difficult to explain how Robespierre came to spare a man who was one of the firmest adherents of this proscribed house; and thus the report originated, that Laclos prepared the speeches of the tribune of the people. After the 9th Thermidor, Laclos returned to the military profession, and was advanced to the office of inspector-general of artillery. He died at Tarentum, in 1803.

LACONIA. (See *Sparta*.)

LACRETELLE; two brothers, well known as authors, but entirely opposed to each other in principles.—1. *Pierre Louis Lacretelle*, the elder (commonly called *Lacretelle aîné*), was born in 1751, at Metz, where his father was an advocate, and died Sept. 5, 1824, at Paris. Animated by the masterly works of the advocate-general Servan to the study of law, ethics and literature, he went, in 1778, to Paris, where he became parliamentary advocate, and, by his writings—*Eloge de Montausier* (which obtained the second prize in 1781), *Mémoires du Comte de Saunois* (a work new and unique in its kind), and the *Discours sur le préjugé des Peines infamantes* (which received the prize of the academy)—rendered himself worthy of a place in the institute, where he succeeded La Harpe, with whom he was concerned in editing the *Mercury*—an occupation which he undertook anew, in 1817, under very different circumstances, in conjunction with Jouy, Jay, B. Constant and others. Lacretelle embraced the principles of the revolution with the ardor of a noble mind, but without concurring in its excesses. In the legislative assembly, in 1792, he was one of the leaders of the constitutional party, in opposition to the Girondists, who were in favor of republicanism. After the 10th of August, Lacretelle devoted his attention wholly to literature. We find him again in public life in 1801, when he was a member of the legislative body of Napoleon. Here he retained his inde-

pendence in the midst of political revolutions. When the government of Napoleon destroyed his hopes of the establishment of a liberty founded on the laws, he again retired. His poverty, which he neither complained of nor regretted, was honorable to him. The aristocratical reaction, which took place in France, after the second restoration, and was particularly memorable in the chamber of 1815 (see *Chambre Introuvable*), threw him into the opposition, which the liberal party at that time began to form, and in support of which they had undertaken the direction of the *Mercury de France*. But this journal, which appeared on fixed days, becoming subject, in consequence of a new law, to the inspection of the censor of the press, was given up, and the *Minerve Française*, which appeared irregularly, took its place. Lacretelle, in conjunction with Aignan, had the direction of this literary and political journal. The *Minerve Française* obtained so decided an influence upon public opinion, that this was also subjected, by a new ordinance, to the censorship, after eight volumes had been published, upon which it was immediately discontinued. Lacretelle, who was now a bookseller, hazarded a continuation of it in the form of small pamphlets; but he was subjected to a prosecution, in which he defended himself with great energy and ability. He was condemned, however, to imprisonment; but Louis XVIII remitted the sentence on account of his age and infirmities, and the general esteem in which he was held. From that time, Lacretelle employed himself upon a collection of his works, which appeared at Paris, in 1823, in four parts. He was the author of many logical, metaphysical and ethical articles in the *Encyclopédie méthodique*. Many of his scattered essays and treatises appeared in 1802, under the title of *Œuvres diverses*, in five volumes, to which, in 1817, he subjoined *Fragmens politiques et littéraires*, and, in 1822, *Œuvres*, and *Portraits et Tableaux* (among them those of Mirabeau, Bonaparte and Lafayette), in two volumes. His theatrical romance *Malherbe, ou le Fils naturel* (D'Alembert), is an excellent dramatic poem. His *Soirées avec Guillaume Lamignon de Malherbes*, and his *Études sur la Révolution Française*, are also highly esteemed. Both have been published since his death.—2. *Charles Lacretelle*, the younger brother of the preceding, went, when very young, to Paris, at the breaking out of the revolution. He soon attracted attention by his logical acuteness,

and the editorial department of the *Journal des Débats*, which was established at that time, was committed to him in connexion with another individual by the name of H. Ducos. His second literary production was his *Précis de la Révolution*, which was a continuation of the work of Rabaud St. Etienne. On the occasion of the opposition of the Parisian sections to the decree of the national convention retaining two thirds of their number in the new legislature, Charles Lacretelle composed, in the name of the sections, the caustic addresses to the convention, as well as to the electoral assemblies of France; but, on the 13th Vendémiaire, Bonaparte put an end to these commotions. Being, however, attached to the then existing opposition, and using his influence in its favor, he was, on the 18th Fructidor, arrested, and retained prisoner for two years. After the 18th Brumaire, however, Napoleon employed his talents in various occupations. In 1813, he received Esmenard's place in the national institute, and, in 1816, the presidency of the French academy, or the third class of the institute. The historical lectures, which, as professor of history, he delivered before the university of Paris, were among the most frequented in that city. As a historical writer, he has a peculiarly brilliant diction, although his ideas want force and profundity. His *Histoire de France pendant les Guerres de Religion* is more highly esteemed than his *Histoire de France pendant le dix-huitième Siècle* (14 volumes, 1826). Lacretelle has now renounced his former philosophical views. In his *L'Histoire de l'Assemblée constituante*, he takes part entirely with the ultras and obscurants. During twenty-six years, he was censor of the department of the drama. He has been termed the chief support of the *Société des bonnes Lettres*, so called. He was likewise honored with the dignity of nobility by Louis XVIII. In 1827, the ministry deprived him of his censor's office, because he favored, in the academy, the petition to the king against the laws respecting the censorship of the press. In 1829 appeared his *Histoire de France depuis la Restauration* (3 volumes, not completed).

LACTANTIUS, Lucius Cælius Firmianus, a celebrated father of the Latin church, distinguished as an orator and author, is commonly supposed to have been an African. He lived for a long time at Nicomedia, as a teacher of rhetoric, until Constantine the Great committed to his care the education of his eldest son, Cris-

pus. He died about 325. His writings (published by Sparke, at Oxford, 1684; by Bünnemann, at Leipsic, 1739; by Dufresnoy, at Paris, 1748, 2 volumes, 4to.; and by Oberthür, at Wurtzburg, in 1783, 2 volumes) are characterized by a clear and agreeable style, and he is, on account of his pure and eloquent language, frequently called the *Christian Cicero*. His seven books *Institutiones divinæ* are particularly celebrated, and worthy of notice.

LADIES' SLIPPER (*Cypripedium*); a beautiful genus of orchideous plants, conspicuous for its large, inflated flowers. The roots are perennial; the stems simple, bearing entire sheathing leaves; and the flowers are solitary or few in number. The species are confined to the northern regions of the globe: six inhabit the Alleghany mountains, Canada, and the northern parts of the U. States; and five are found in Siberia, and the northern and mountainous parts of Europe.

LADOGA, or LADOZSKOI; a lake in Russia, between the Baltic and the lake Onega, surrounded by the governments of Petersburg, Viborg and Olonetz. The south-west extremity lies 30 miles east of Petersburg. It is 140 miles long, and 75 broad, containing 6200 square miles, and is the largest lake in Europe. It contains an abundance of fish, particularly salmon. The shores are flat, but the navigation dangerous, on account of quicksands.

LADRONES; a cluster of islands in the Northern Pacific ocean, discovered by Magellan. Their number is stated by some authorities as 14, by others as 16. They occupy a space of 450 miles; lon. 145° to 148° E.; lat. 13° to 21° N. Magellan called them *Islas de Ladrones* (islands of thieves), because the natives stole every thing made of iron which they could find. Towards the end of the seventeenth century, they received the name of *Mariana*, or *Marianne* islands, from the queen of Spain, Mary Ann of Austria, the mother of Charles II, at whose expense missionaries were sent over thither, to propagate the Christian faith. In almost all books of history and voyages, as well as in maps, we find them styled the *Ladrones*; notwithstanding which, the above-mentioned name has gradually gained ground. These islands lie in the torrid zone; and yet so much is the heat of the sun tempered by the air, and by breezes of the sea, that the climate is generally serene, salubrious and pleasant: in some seasons of the year only they are liable to hurricanes, which, though they do sometimes a great deal of mischief, yet

clear and refresh the air in such a manner that, before they were visited by the Europeans, the people commonly lived to a great age. The inhabitants are tall, robust, active and ingenious. They wear little clothing. Both sexes stain their teeth black, and paint their bodies red. Their religion is an ignorant superstition. That most extraordinary and useful plant, the bread-fruit tree, was first discovered here.

LADY-BIRD; a pretty species of beetle, belonging to the extensive genus *coccinella*, having the elytra red, bordering on yellow, and adorned with two black spots, one on the middle of each. It appears, however, that almost all the small and spotted beetles of this genus are indiscriminately known under the name of *lady-bird*. All these insects deposit their eggs on the leaves of trees, and the *larvæ* produced are great devourers of plant-lice (*aphis*). They continue in the chrysalid state about a fortnight. Their wings, when they first burst their covering, are soft and dusky, but soon become hard, and assume the various colors appropriate to the species. The lady-bird is celebrated for its reputed powers in the cure of tooth-ache; for which purpose one of these insects is to be crushed between the finger and thumb, which are then to be several times applied to the suffering part. Their virtue in effecting a cure depends on the same cause as that of Perkins's metallic tractors, and other scions of animal magnetism—the imagination of the patient.

LAERTES, son of Acrisius and Chalconethusa, was one of the heroes engaged in the chase of the Caledonian boar, and in the expedition of the Argonauts. He afterwards married Euryclea, the daughter of Autolyceus, by whom he had several daughters and one son, Ulysses. He attained a great age. The long absence of his son, in the Trojan war, plunged him into deep melancholy; but his return restored the old man's energies, and he took part in the fight with the Ithacans.

LETARE; the fourth Sunday after Lent. The ancient Christian church used to begin its service, on this day, with the words *Lætare, sterilis, or Lætare, Jerusalem*.

LAFAYETTE, Gilbert Mottier (formerly marquis de), was born at Chavagnac, near Brioude, in Auvergne, Sept. 6, 1757, was educated in the college of Louis le Grand, in Paris, placed at court, as an officer in one of the guards of honor, and, at the age of 17, was married to the granddaughter of the duke de Noailles. It was under these circumstances, that the young marquis de Lafayette entered upon a ca-

reer so little to be expected of a youth of vast fortune, of high rank, of powerful connexions, at the most brilliant and fascinating court in the world. He left France secretly for America, in 1777, and arrived at Charleston, South Carolina, April 25, being then 19 years old. The state of this country, it is well known, was, at that time, most gloomy: a feeble army, without clothing or arms, was with difficulty kept together before a victorious enemy; the government was without resources or credit, and the American agents in Paris were actually obliged to confess that they could not furnish the young nobleman with a conveyance. "Then," said he, "I will fit out a vessel myself;" and he did so. The sensation produced in this country, by his arrival, was very great: it encouraged the almost disheartened people to hope for success and sympathy from one of the most powerful nations in Europe. Immediately on his arrival, Lafayette received the offer of a command in the continental army, but declined it, raised and equipped a body of men at his own expense, and then entered the service as a volunteer, without pay. He lived in the family of the commander-in-chief, and won his full affection and confidence. He was appointed major-general in July, and, in September, was wounded at Brandywine. He was employed in Pennsylvania and Rhode Island in 1778, and, after receiving the thanks of the country for his important services, embarked at Boston, in January, 1779, for France, where it was thought that he could assist the cause more effectually for a time. The treaty concluded between France and America, about the same period, was, by his personal exertions, made effective in our favor, and he returned to America, with the intelligence that a French force would soon be sent to this country. Immediately on his arrival, he entered the service, and received the command of a body of infantry of about 2000 men, which he clothed and equipped, in part, at his own expense. His forced march to Virginia, in December, 1780, raising 2000 guineas at Baltimore, on his own credit, to supply the wants of his troops; his rescue of Richmond; his long trial of generalship with Cornwallis, who boasted that "the boy could not escape him;" the siege of Yorktown, and the storming of the redoubt, are proofs of his devotion to the cause of American independence. Desirous of serving that cause at home, he again returned to France for that purpose. Con-

gress, which had already acknowledged his merits on former occasions, now passed new resolutions, Nov. 23, 1781, in which, besides the usual marks of approbation, they desire the American ministers to confer with him in their negotiations. In France, a brilliant reputation had preceded him, and he was received with the highest marks of public admiration. Still he urged upon his government the necessity of negotiating with a powerful force in America, and succeeded in obtaining orders to this effect. On his arrival in Cadiz, he found 49 ships, with 20,000 men, ready to follow him to America, had not peace rendered it unnecessary. A letter from him communicated the first intelligence of that event to congress. The importance of his services in France may be seen by consulting his letters in the Correspondence of the American Revolution (Boston, 1831). He received pressing invitations, however, to revisit the country. Washington, in particular, urged it strongly; and, for the third time, Lafayette landed in the U. States, Aug. 4, 1784. After passing a few days at Mount Vernon, he visited Baltimore, Philadelphia, New York, Boston, &c., and was every where received with the greatest enthusiasm and delight. Previous to his return to France, congress appointed a deputation, consisting of one member from each state, "to take leave of him on behalf of the country, and assure him that these U. States regard him with particular affection, and will not cease to feel an interest in whatever may concern his honor and prosperity." After his return, he was engaged in endeavoring to mitigate the condition of the Protestants in France, and to effect the abolition of slavery. In the assembly of the notables, in 1787, he proposed the suppression of *lettres de cachet*, and of the state-prisons, the emancipation of the Protestants, and the convocation of the representatives of the nation. When asked by the count D'Artois, since Charles X, if he demanded the states-general—"Yes," was his reply, "and something better." Being elected a member of the states-general, which took the name of *national assembly* (1789), he proposed a declaration of rights, and the decree providing for the responsibility of the officers of the crown. Two days after the attack on the Bastile, he was appointed (July 15) commander-in-chief of the national guards of Paris. The court and national assembly were still at Versailles, and the populace of Paris, irritated at this, had already adopted, in sign of opposition, a blue and

red cockade (being the colors of the city of Paris). July 26, Lafayette added to this cockade the white of the royal arms, declaring at the same time that the tricolor should go round the world. On the march of the populace to Versailles (October 5 and 6), the national guards clamored to be led thither. Lafayette refused to comply with their demand, until, having received orders in the afternoon, he set off, and arrived at 10 o'clock, after having been on horseback from before day-light. He requested that the interior posts of the *châteaux* might be committed to him; but this request was refused, and the outer posts only were intrusted to the national guards. This was the night on which the assassins murdered two of the queen's guards, and were proceeding to further acts of violence, when Lafayette, at the head of the national troops, put an end to the disorder, and saved the lives of the royal family. In the morning, he accompanied them to Paris. (See *Louis XVI*.) On the establishment of the Jacobin club at Paris, he organized, with Bailly, then mayor of Paris, the opposing club of *Feuillans*. Jan. 20, 1790, he supported the motion for the abolition of titles of nobility, from which period he renounced his own, and has never since resumed it. The constitution of a representative monarchy, which was the object of his wishes, was now proposed, and July 13, 1790, was appointed for its acceptance by the king and the nation, and, in the name of 4,000,000 national guards, Lafayette swore fidelity to the constitution. Declining the dangerous power of constable of France, or generalissimo of the national guards of the kingdom, after having organized the national militia, and defended the king from the popular violence, he resigned all command, and retired to his estates. The first coalition against France (1792) soon called him from his retirement. Being appointed one of the three major-generals in the command of the French armies, he established discipline, and defeated the enemy at Philippeville, Maubeuge and Florennes, when his career of success was interrupted by the domestic factions of his country. Lafayette openly denounced the terrible Jacobins, in his letter of June 16, in which he declared that the enemies of the revolution, under the mask of popular leaders, were endeavoring to stifle liberty under the excesses of licentiousness. June 20, he appeared at the bar of the assembly, to vindicate his conduct, and demand the punishment of the guilty authors of the violence. But the Mountain

had already overthrown the constitution, and nothing could be effected. Lafayette then offered to conduct the king and his family to Compiègne. This proffer being declined, he returned to the army, which he endeavored to rally round the constitution. June 30, he was burnt in effigy at the Palais-Royal, and, Aug. 5, was accused of treason before the assembly. Still he declared himself openly against the proceedings of August 10; but, finding himself unsupported by his soldiers, he determined to leave the country, and take refuge in some neutral ground. Some persons have charged general Lafayette with a want of firmness at this period; but it is without a full understanding of the situation of things. Conscious that a price was set on his head at home, knowing that his troops would not support him against the principles which were triumphing in the clubs and the assembly, and sensible that, even if he were able to protract the contest with the victorious faction, the frontiers would be exposed to the invasions of the emigrants and their foreign allies, with whom he would have felt it treason against the nation to have negotiated, he had no alternative. Having been captured by an Austrian patrol, he was delivered to the Prussians, by whom he was again transferred to Austria. He was carried, with great secrecy, to Olmütz, where he was subjected to every privation and suffering, and cut off from all communication with his friends, who were not even able to discover the place of his confinement until late in 1794. An unsuccessful attempt was made to deliver him from prison by Dr. Bollman, a German, and Mr. Huger (now colonel Huger, of Charleston, S. C.). His wife and daughters, however, succeeded in obtaining admission to him, and remained with him nearly two years, till his release. Washington had written directly to the emperor of Austria on his behalf, without effect; but, after the memorable campaign of Bonaparte in Italy, the French government required that the prisoners at Olmütz should be released, which was done Aug. 25, 1797, after a negotiation that lasted three months. Refusing to take any part in the revolutions of the 18th Fructidor, or of the 18th Brumaire, he returned to his estate at La Grange, and, declining the dignity of senator, offered him by Bonaparte, he gave his vote against the consulate for life, and, taking no further part in public affairs, devoted himself to agricultural pursuits. On the restoration of the Bourbons, in 1814, he perceived that their prin-

ciples of government were not such as France required, and he did not therefore leave his retirement. The 20th of March, 1815, again saw Napoleon on the imperial throne, and endeavoring to conciliate the nation by the profession of liberal principles. Lafayette refused, though urged, through the mediation of Joseph, to see him, protested against the *acte additionnel* of April 22, declined the peerage offered him by the emperor, but accepted the place of representative, to which the votes of his fellow-citizens called him. He first met Napoleon at the opening of the chambers: the emperor received him with great marks of kindness, to which, however, he did not respond; but, although he would take no part in the projects of Napoleon, he gave his vote for all necessary supplies, on the ground that France was invaded, and that it was the duty of all Frenchmen to defend their country. June 21, Napoleon returned from Waterloo, and it was understood that it was determined to dissolve the house of representatives, and establish a dictatorship. Two of his counsellors informed Lafayette that, in two hours, the representative body would cease to exist. Immediately on the opening of the session, he ascended the tribune, and addressed the house as follows: "When, for the first time, after an interval of many years, I raise a voice which all the old friends of liberty will still recognise, it is to speak of the dangers of the country, which you only can save. This, then, is the moment for us to rally round the old tri-colored standard, the standard of '89, of liberty, of equality, of public order, which we have now to defend against foreign violence and domestic usurpation." He then moved that the house declare itself in permanent session, and all attempts to dissolve it high treason; that whoever should make such an attempt, should be considered a traitor to the country, &c. In the evening, Napoleon sent Lucien to the house, to make one more effort in his favor. Lucien, in a strain of impassioned eloquence, conjured the house not to compromise the honor of the French nation by inconstancy to the emperor. At these words, Lafayette rose in his place, and, addressing himself directly to the orator, exclaimed, "Who dares accuse the French nation of inconstancy to the emperor? Through the sands of Egypt, and the wastes of Russia, over 50 fields of battle, this nation has followed him devotedly; and it is for this that we now mourn the blood of three millions of Frenchmen." This ap-

peal had such an effect on the assembly, that Lucien resumed his seat without finishing his discourse. A deputation of five members from each house was then appointed to deliberate in committee with the council of ministers. Of this deputation, general Lafayette was a member, and he moved that a committee should be sent to the emperor to demand his abdication. The arch-chancellor refused to put the motion; but the emperor sent in his abdication the next morning (June 22). A provisional government was formed, and Lafayette was sent to demand a suspension of hostilities of the allies, which was refused. On his return, he found Paris in possession of the enemy; and, a few days after (July 8), the doors of the representatives' chamber were closed, and guarded by Prussian troops. Lafayette conducted a number of the members to the house of Lanjuinais (q. v.), the president, where they drew up a protest against this act of violence, and quietly separated. Lafayette now retired once more to La Grange, where he remained till 1818, when he was chosen member of the chamber of deputies. Here he continued to support his constitutional principles, by opposing the laws of exception (see *Laws of Exception*), the establishment of the censorship of the press, the suspension of personal liberty, &c., and by advocating the cause of public instruction, the organization of a national militia, and the inviolability of the charter.—In August, 1824, he landed at New York, on a visit to the U. States, upon the invitation of the president, and was received, in every part of the country, with the warmest expressions of delight and enthusiasm. He was proclaimed, by the popular voice, “the guest of the nation,” and his presence was every where the signal for festivals and rejoicings. He passed through the 24 states of the Union in a sort of triumphal procession, in which all parties joined to forget their dissensions, in which the veterans of the war renewed their youth, and the young were carried back to the doings and sufferings of their fathers. Having celebrated, at Bunker hill, the anniversary of the first conflict of the revolution, and, at Yorktown, that of its closing scene, in which he himself had borne so conspicuous a part, and taken leave of the four ex-presidents of the U. States, he received the farewell of the president in the name of the nation, and sailed from the capital in a frigate named, in compliment to him, the *Brandywine*, Sept. 7, 1825, and arrived at Havre, where the citizens, having peaceably as-

sembled to make some demonstration of their respect for his character, were dispersed by the *gendarmérie*. In December following, the congress of the U. States made him a grant of \$200,000, and a township of land, “in consideration of his important services and expenditures during the American revolution.” The grant of money was in the shape of stock, bearing interest at six per cent., and redeemable Dec. 31, 1834. In August, 1827, he attended the obsequies of Manuel, over whose body he pronounced a eulogy. In November, 1827, the chamber of deputies was dissolved. Lafayette was again returned a member by the new elections. Shortly before the revolution of 1830, he travelled to Lyons, &c., and was enthusiastically received—a striking contrast to the conduct of the ministers towards him, and an alarming symptom to the despotic government. During the revolution of July, 1830, he was appointed general-in-chief of the national guards of Paris (q. v.), and, though not personally engaged in the fight, his activity and name were of the greatest service. To the Americans, Lafayette, the intimate friend of Washington, had appeared, in his late visit, almost like a great historical character returning from beyond the grave. In the eyes of the French, he is a man of the early days of their revolution—a man, moreover, who has never changed side or principle. His undeviating consistency is acknowledged by all, even by those who do not allow him the possession of first rate talents. When the national guards were established throughout France, after the termination of the struggle, he was appointed their commander-in-chief, and his activity in this post was admirable. Aug. 17, he was made marshal of France. His influence with the government seems to have been, for some time, great, but whether his principles were too decidedly republican to please the new authorities (a few days after the adoption of the new charter, he declared himself against hereditary peerage, and repeatedly called himself a pupil of the American school), or whether he was considered as the rallying point of the republican party, or whatever may have been the reason, he sent in his resignation in December, 1830, which was accepted, and count Lobau appointed chief of the national guards of Paris. Lafayette declared from the tribune, that he had acted thus in consequence of the distrust which the power accompanying his situation seemed to excite in some people. On the same occasion, he also expressed his disap-

probation of the new law of election. Shortly before his resignation, he exerted himself most praiseworthy to maintain order during the trial of the ex-ministers. The Poles lately made him first grenadier of the Polish national guards. We are unable to state what are Lafayette's views respecting the best government for France in its present condition, though undoubtedly, in the abstract, he prefers a republic. Regnault-Warin's *Mémoires sur le Général Lafayette* (Paris, 1824) contains many facts relative to his political life in France. His secretary, M. Levasseur, published an account of his tour in the U. States (Paris, 1825), which has been translated in America. (For further information, see the *North American Review* for January, 1825.)

LAFAYETTE, Maria Magdalena, countess de; a lady of literary celebrity, daughter of the governor of Havre de Grâce, Aymar de la Vergue. A careful and classical education had given her a great love for literature. In 1655, she married count Francis de Lafayette, and her house now became a place of meeting for the most distinguished men of her time. The famous duke of Rochefoucauld was one of her intimate friends. Among the learned men who surrounded her, the most distinguished were Huet, Ménage, Lafontaine and Ségrais. She died 1693. Her works entitle her to an honorable place among French writers. The most distinguished of them are *Zaïde*, *La Princesse de Clèves*, and *La Princesse de Montpensier*.

LAFAYETTE MOUNTAIN. (See *Haystack*.)

LAFFITTE, Jacques, a banker in Paris, member of the legion of honor, and, in 1816, elected to the chamber of deputies, a man equally distinguished for his talents, his wealth and his virtues, was born at Bayonne, in 1767, and, by his own diligence and merit, acquired a fortune in the banking-house of the senator Perregaux. In 1805, he became the head of the house, which he made one of the first houses in France. In 1809, he was appointed director of the bank of France, and, in 1814, president of the same establishment. He discharged the duties of this important office without accepting the large salary connected with it. In 1809, he was made president of the chamber of commerce in Paris, and, in 1813, judge of the tribunal of commerce. When the credit of France, in 1815, was at a very dangerous crisis, Laffitte advanced 2,000,000, in ready money, by which means a necessary article in the capitulation of Paris was settled. It was owing

to his counsels, that France was enabled to support the burden of the military contributions imposed on her, without injury to the credit of the state. But when Laffitte joined the left side in the chamber of deputies, and opposed the encroachments of the infatuated absolutists, the laws of exception and the clergy, he became an object of hatred to the ultras, and of suspicion to the ministry. In 1819, he was deprived of the presidency of the bank, which was bestowed on the duke of Gaëta, with a large salary; yet he was, in 1822, unanimously reelected to the office of *régent de la banque* (director). His eloquent speeches in the chamber, some of which were extemporaneous, prove his talents and knowledge, especially in the department of finance. He also spoke with energy on the occasion of the disturbances in Paris in 1819, when the young Lallemand was shot in the street by one of the watch, and old men, children and women were trampled down by the *gendarmes*. He was not reelected for the session of 1824. By favoring the reduction of the *rentes*, he appears to have lost his popularity. The chamber of deputies accepted the proposal for the reduction of the interest on the public securities then in circulation, but the chamber of peers rejected it. To prove the justice and advantages of this plan, and to justify his own conduct in the project, he wrote his *Réflexions sur la Réduction de la Rente et sur l'Etat du Crédit*, a financial work of much merit. The second edition was published at Paris, in 1824. How great the confidence reposed in Laffitte has been, the following fact will serve to show. When Louis XVIII was compelled to flee, in 1815, he intrusted his private property, for safe keeping, to Laffitte; three months after, Napoleon, under the same circumstances, showed him the same confidence, and, at St. Helena, named him his executor. As Napoleon, in the hundred days, had respected the private property of Louis, so Louis XVIII respected that of the emperor, and put no obstacles in the way of the execution of his last will. Among the merits of Laffitte, his great benevolence to the poor ought not to pass unnoticed. The publishers of the Latin classics, at Paris, were also assisted by him in carrying on their useful undertaking. Laffitte was, in 1827, again elected to the chamber of deputies. His only daughter was married, in 1828, to the prince of Moskwa, eldest son of the celebrated marshal Ney. He took an active part in the revolution of July, 1830, being one of the deputies who

signed the protest, and declared themselves deputies of France, in spite of Polignac's order to annul the election. Laffitte was also one of the deputies, who, during the fight on July 29, went to marshal Marmont, in order to put a stop to the conflict. November 3, 1830, he was made minister of finance and president of the council, in which situation he remained until March 14, 1831, when he was succeeded by M. Casimir Perrier, belonging to the left centre. Laffitte has suffered immense losses in consequence of the fall of stocks since the revolution of July, 1830. Chateaubriand, in a late pamphlet, has asserted that Villele had intended to make Laffitte minister of finance.

LAFITAU, Joseph Francis; a French Jesuit, who was a native of Bordeaux, and was employed as a missionary among the savages of North America. On his return to Europe, he published a work, entitled *Mœurs des Sauvages Américains comparées aux Mœurs des premiers Temps* (Paris, 1724, 2 volumes, 4to.); and another on the Discoveries and Conquests of the Portuguese in the New World (1733, in 2 volumes, 4to.). In the former, he maintains that the North American savages are descended from the barbarians who inhabited Greece at an early period. He died in 1740.

LAFITTE; a Bordeaux wine. (See *Bordeaux Wines*.)

LAFONTAINE, Jean. (See *Fontaine*, *la*.)

LAFONTAINE, Augustus Henry Julius, the most fertile and one of the most popular novelists of Germany, was born in 1756, in Brunswick. He studied theology, and, in 1792, accompanied the Prussian army into Champagne, in the capacity of chaplain. He lives now at Halle. His novels are entertaining, but not distinguished by merit of a high order. Of late, he has occupied himself with *Æschylus*, and published *Agamemnon* and the *Cœphori*, with judicious notes (Halle, 1821 et seq., 2 vols.), in which he sets forth some peculiar views respecting the text of this author.

LAGO MAGGIORE, or LAKE MAJOR, or LOCARNO (anciently *Verbanus*); a large lake in Italy, separating the Austrian government of Milan from the Sardinian Milanese, extending from Sesto to Locarno; about 45 miles long, and 7 broad. It is 636 feet above the level of the sea, according to Saussure, and, in some places, 1800 feet deep. It is traversed by the Ticino. Its waters, which are as clear as crystal, contain various fish. Its banks abound in every Alpine beauty, and are

adorned with a number of picturesquely situated villages and towns. On all sides it is surrounded by hills, planted with vineyards and plantations of chestnuts, interspersed with villas. There are several islands, two of which, Isola Bella and Isola Madre, called *Borromean islands*, are laid out in gardens and pleasure grounds, with palaces erected on them, adorned with paintings, sculptures, &c. Isola de' Pescatori is inhabited by fishermen. (See *Borromei Islands*.)

LAGO NERO, or NEGRO; a town in Naples, in Basilicata, at the foot of the Appennines, near a lake from which it receives its name; 12 miles north-east of Policastro; population, 5000. In March, 1806, a battle was fought here between the French and the troops of the king of Naples, in which the former were victorious.

LAGOON (from the Latin *lacuna*, a ditch) means a *morass*. The name is given particularly to those creeks which extend along the coast of the Adriatic, in the present government of Venice, and which are formed by water running up in the land. They contain many islands; Venice, for instance, is built on 60 of them. In some places, they are deep; in others so shallow, that their exhalations are offensive and dangerous. The Austrian government does less towards clearing them out than the former Venetian government did; and Venice, in consequence, is considerably less healthy than it was. Towards the sea, the islets are secured by dams, natural or artificial.

LAGRANGE, Joseph Louis, a celebrated mathematician, was born in 1736, at Turin, and originally directed his attention to philosophy. But his natural taste for mathematics soon unfolded itself, and he studied with such ardor, that, in his 18th year, in a letter to the celebrated Fagnano, he communicated to him a number of mathematical discoveries which he had made. He also solved the questions, which had been proposed a long time before, by Euler, on the calculation of isoperimetrical figures, and on the theory of the least action. When scarcely 19 years of age, Lagrange was made mathematical professor in the artillery school at Turin; and the memoirs of the scientific association, which he established with the approbation of the government, and in conjunction with the celebrated Cigna and the marquis of Saluces, excited such attention in the literary world, that he was elected a fellow of the academy at Berlin, and Euler and D'Alembert entered

into a constant correspondence with this young man. During a journey to Paris, which he made in company with his friend Caraccioli, who was sent as an ambassador to London, Lagrange became personally acquainted with the Parisian savants, and was received with general respect. But ill health soon obliged him to return home, where he applied himself with renewed diligence to his scientific labors. At this time, he obtained the prize of the academy of sciences in Paris, for a treatise on the theory of the satellites of Jupiter, and, at the same time, by his exposition of the leading features of his doctrine in regard to the planetary system, rendered his name immortal. He soon after received an invitation from Frederic the Great, to go to Berlin, with the title of director of the academy, in place of Euler, who had gone to St. Petersburg. The king of Sardinia was, however, very reluctant to permit his distinguished subject to depart. Esteemed by the great Frederic, who preferred his independent spirit to the somewhat too submissive character of Euler, and valued highly by all who became acquainted with him, Lagrange lived in Berlin in pleasant circumstances (which were interrupted, however, by the continual sickness of his wife), during the lifetime of the king. After Frederic's death, the regard which had been paid to men of genius and talent at the Prussian court declined, and Lagrange began to look about for another situation. At this period, Mirabeau saw him in Berlin, and resolved to obtain this renowned geometrician for France. Lagrange accepted the offers made him from Paris, and declined the proposals of the ambassadors of Naples, Sardinia and Tuscany. He was received at Paris, in 1787, with the highest tokens of respect. But a deep melancholy seemed to have taken entire possession of him, and to have palsied his mind, notwithstanding all the efforts which his friends made to remove it. He suffered the same inconvenience which D'Alembert had once before experienced, viz. of having lost all love for his science. Lagrange now zealously employed himself upon the history of religion, the theory of ancient music, languages, and even the medical sciences. His own favorite science alone had no attractions for him, and he even suffered his most celebrated work, *La Mécanique analytique* (for which Du Chatelet, to whom Lagrange had given the manuscript, was for a long time unable to find a publisher), to lie untouched

for two years after its publication. At the proposal of Du Séjour, he was, in 1791, confirmed by the national assembly in his pension of 6000 francs, and, in order to indemnify him for the depreciation of the paper currency, he was first appointed a member of the committee for rewarding useful inventions, and, afterwards (in March, 1792), one of the directors of the mint. Dissatisfied with this station, although Cicero and Newton had discharged similar offices, he soon resigned it, considering it as an oppressive burden. In the same year, he was married, for the second time, to a daughter of the academician Lemonnier, hoping to lead a tranquil life in the midst of the storms of the revolution. The decree of October 16, 1793, commanding all foreigners to leave France, and the execution of Bailly, Lavoisier, and other distinguished men, soon, however, destroyed his illusions. Through the instrumentality of Guyton Morveau, the severe law of banishment from the country was not put in force against him; but the danger of becoming a victim to the rage of the infuriated populace remained. Hérault de Séchelles offered to procure him a place in an embassy to Prussia, but Lagrange, who had conceived a warm affection for his new country, preferred to remain there in spite of the danger. Peace and quiet at length returned. It was proposed to restore the institutions for the promotion of learning, which had been destroyed during the reign of anarchy, and Lagrange was appointed professor in the newly established normal school at Paris. In this new sphere of influence, his former love for his science returned with all its strength. At the formation of the institute, the name of Lagrange was the first on the list of members, and he was, likewise, the first member of the newly constituted bureau of longitude. His fame now increased from day to day, and France, feeling honored in the possession of such a man, determined to give him a public mark of her esteem. By the command of the directory, the minister of foreign affairs, Talleyrand, commissioned the French chargé d'affaires in Turin, citizen D'Eymar, to visit Lagrange's father, and congratulate him, in the name of France, in having such a son. This commission was performed by D'Eymar in the most brilliant manner, accompanied by several generals and other distinguished persons. Napoleon respected the talents and services of Lagrange not less than the republic had done; and while consul and emperor, he never ceased to show

him distinguished tokens of his favor in every possible way. Member of the senate, grand officer of the legion of honor, and count of the empire, Lagrange saw himself surrounded with every external honor; but neither this, nor the confidence reposed in him by the head of the state, could make him vain, and, as modest and retiring as ever, he devoted himself with the same zeal and industry to his studies. His application probably hastened his death. Notwithstanding his advanced age, he could not be content to relax his exertions, and had superintended the publication of the second edition of his *Théorie des Fonctions analytiques*, enriched with annotations, when, exhausted by his labors, he died, April 10, 1813. His remains were interred in the Pantheon. Laccépède and La Place pronounced funeral addresses over his body. Lagrange was no less amiable than modest, and was never led, by the honors bestowed upon himself, to underrate the merits of others. His respect for Euler was unlimited, and he was frequently accustomed to say to his scholars, "Study Euler, if you would become geometers." His works have been partly published separately, and are partly contained in the memoirs of the academies of Turin, Berlin and Paris, in the Journal of the Polytechnical School, the *Connaissance de Temps*, and in the *Ephémérides*. The most important are his *Mécanique analytique* (Paris, 1787; new editions, 1811 and 1815); *Théorie des Fonctions analytiques* (Paris, 1797 and 1813); *Résolutions des Equations numériques* (Paris, 1798 and 1808); *Leçons sur le calcul des Fonctions* (there are several editions of this work, but the latest is that of Paris, 1806), and *Essai d'Arithmétique politique* (to be found in the Collections edited by Roeder, in 1796). A part of Lagrange's posthumous papers were, in 1815, given to the institute, by Carnot, minister of the interior; and, by a subsequent vote of the academy of sciences, they were incorporated with the library of that learned society.

LAGUS. (See *Ptolemy*.)

LAHARPE, Jean François de; a French dramatic poet, critic and philosopher of the last century, born at Paris, November 20, 1739. His father, a Swiss officer in the French service, dying in indigence, Asselin, president of the college of Harcourt, admitted him into that seminary, where he received an excellent education. A lampoon on his benefactor, which was, in all probability without foundation, attributed to him, occasioned the confine-

ment of the suspected satirist for some months in the Bastille. This circumstance disgusted him with his situation, and, at a very early age, he threw himself on his own talents as an author for support. In 1762, he published a collection of poems. The tragedy of Warwick (1763) was very beneficial to him in a pecuniary point of view, and procured him considerable reputation. It still remains on the stage. His Timoleon and Pharamond met with less success; but a series of *éloges* on Charles V, Catinat, Fénelon, Voltaire, and Henri Quatre (especially the latter), gained him much credit, in a different department of literature. On the breaking out of the revolution, Laharpe embraced the principles of republicanism; but, during the reign of terror, his moderation rendering him an object of suspicion to those then in power, he was thrown into prison in 1793, and, while in confinement, is said to have owed his conversion to Christianity to the arguments of his fellow-captive, the bishop of St. Brioux. Though sentenced to deportation, the changes of the times finally restored him to liberty, and he passed the remainder of his days in literary retirement. A short time before his death, his remarks on the measures of the government excited the displeasure of the first consul, and he was banished to Orleans. He soon returned, however, and died in 1803, in his 64th year. His principal work is the *Lycée*, or a complete Course of Literature (8vo., 12 vols.). Among the rest are Gustavus Vassa, Timoleon, Pharamond, and Philoctetes, tragedies; the latter an elegant translation from the Greek of Sophocles. *Tangu et Félimé* (a poem, 1779); Translations of Camoens' *Lusiad* (2 vols.); the Psalms of David, and the works of Suetonius (2 vols.); a Commentary on the dramatic Works of Racine (7 vols., 8vo.); the Correspondence with the Czar Paul the First (4 vols., 8vo.), and a refutation of the opinions of Helvetius.

LAHARPE, Frederic César, director of the Helvetic republic, was born at Rolle, in a family belonging to the nobility of the Pays de Vaud, in 1754. He cultivated the sciences with great zeal, particularly mathematics. At Geneva, Saussure and Bertrand were his teachers. He studied law in Tubingen, and was made doctor in his 20th year. After having been a lawyer in Berne, he travelled, with a young Russian of a distinguished family, through Italy and Malta, and, in 1783, he became teacher of the grand-duke Alexander and his brother, at Petersburg. After the

French revolution had broken out, he drew up, in the name of his fellow-citizens, a respectful petition to the council of Berne, requesting a meeting of deputies, for the purpose of abolishing abuses. Soon after, troubles broke out, and the government, who considered him as one of the instigators, put his name on the list of exiles, and his enemies succeeded in removing him from the person of Alexander. He went to Geneva, and was about to return to Berne, when he learned that orders for his arrest had been given there. Indignant at this, he went, in 1796, to Paris, where he continued to write in favor of the cause of liberty, and published a work entitled *Lettres de Philanthropos*. In consequence of a petition addressed by him and 22 other exiles from the Pays de Vaud and Friburg, to the French directory, requesting the fulfilment of the guarantee established by the treaty of Lausanne, 1565, the directory interfered in the affairs of Switzerland, the Swiss revolution broke out, French armies penetrated into Switzerland, and a new organization was given to this country. Laharpe was made one of the directors of the Helvetic republic, and exerted himself energetically in carrying on the new system, until a violent quarrel took place between the legislative body and the body of directors, and the latter was dissolved, and Laharpe put under *surveillance*. Friends and enemies both allowed the honesty of his intentions. In 1800, when on the point of leaving Lausanne for Paris, he was deceived by a letter, probably a forgery, communicating intelligence of a conspiracy against the first consul, Bonaparte, who was then commanding in Italy. This he gave up to the proper authorities, and was, in consequence, arrested by the legislative council of Berne, as himself concerned in the conspiracy. He escaped by flight to Paris, where he was coolly received by Bonaparte, and went to live at a country-seat (Plessis Piquet) near Paris. In 1801, he made a journey to Russia, and returned with proofs of the esteem of his former pupil, the emperor. In 1814, he visited him in Paris, and was appointed a general in the Russian service. At the congress of Vienna, he labored actively to effect the independence of the cantons of the Pays de Vaud and Aargau, and their separation from Berne. He has since then lived as a private man in his native country, enjoying the highest esteem of his countrymen.

LA HOGUE ; the north-western point of

the peninsula, near Cherbourg, in the department La Manche. A naval battle was fought here May 29, 1692, between the French, under Fourville, and the English and Dutch, under Russel. The French were beaten. James II beheld the battle from the land, and was obliged to witness the defeat of his party.

LAHYRE (properly *Etienne Vignoles*) ; a brave knight in the reign of Charles VII of France, and the faithful companion of the maid of Orleans. Lahyre hated the English bitterly, as his family had been ruined by their invasions. In 1418, when Coucy was surrendered to the Burgundians, the allies of the English, in consequence of the treachery of the mistress of the commandant, Lahyre and the equally brave Peter de Xaintrailles placed themselves at the head of the remnant of the garrison, and successfully led their little band, in the midst of constant skirmishes, through a country filled with enemies. After many valiant deeds in Valois, and in Champagne, Lahyre hastened to the relief of Orleans. The government of the town sent him with a petition to the dauphin, Charles VII, to implore his assistance. He found the weak and pleasure-loving prince preparing for an entertainment. "What are your thoughts?" said Charles to the knight, who viewed with indignation the frivolity of the court. "I think," replied Lahyre, "that a kingdom could not be lost more merrily." Returning to Orleans, he did his utmost to save the town, and to assemble the relics of the beaten army. In 1429, the maid of Orleans appeared. Lahyre joined her, and was with her at her entrance into the town. He followed the defeated English, and distinguished himself in the battles of Jargeau and Patay. In the middle of winter, he stormed Louviers, and advanced to Rouen with the intention of liberating the imprisoned Joan (q. v.) ; but the English took him prisoner. He soon, however, obtained his liberty, and renewed his exertions, with Xaintrailles, against the enemy. To his death, Lahyre was the most inveterate enemy of the invaders of his country, and injured them greatly. He was repeatedly taken prisoner, often by the treachery of false friends ; but he always succeeded in liberating himself : for a time, he even braved his own king, continuing a petty warfare against the English and the Burgundians, and garrisoning several towns, although Charles had concluded a peace. On a journey to Montauban, where he accompanied Charles VII, in 1442, he died in consequence of his wounds. His ro-

manic valor, together with his attachment to the maid of Orleans, procured him, after his death, the honor of having his name added to the knave of hearts in the French playing cards; the pictures of which are, as it is well known, designated by the names of different heroes.

LAINÉ, Joseph Henry Joachim, peer of France, formerly minister of the interior, and president of the chamber of deputies, was born at Bordeaux, Nov. 11, 1767. He was a lawyer at the outbreak of the French revolution, in the last century, when he embraced republican principles. His zeal procured him, in 1792—3, some important posts in the administration, in which he showed great activity. He also distinguished himself as an orator. In 1808, he was chosen member of the *corps législatif* for the department of the Gironde, and was distinguished for his liberal opinions. About this time, he received the star of the legion of honor, but entered into a correspondence with the friends of the royal family. After Napoleon's disasters in Russia, the legislative body appointed a committee (1813) to report the wishes of the nation. It consisted of Lainé, Raynouard, Gallois, Flaugergues, and Maine de Biran. Raynouard was chairman, and the language of the report was bold. Raynouard's speech to the emperor, on this subject, contained these words: "*Si vous (the emperor) ne voulez pas nous donner la paix, nous la ferons nous-mêmes.*" The *corps législatif*, so long submissive, now made bold by the disasters of the emperor, was prorogued. Lainé went to Bordeaux, and, in 1814, was made prefect of the city by the duke of Angoulême, who had arrived there, and soon after president of the chamber of deputies. On Napoleon's return from Elba, Lainé spoke with zeal against him, and called him "the common enemy," and, on the emperor's entry into Paris, published a protest against the dissolution of the chamber, and absolving all Frenchmen from obedience to the demands of the "usurper." He left Bordeaux, it is said, for Holland, when the duchess of Angoulême quitted that place, and, after the second restoration, again appeared as president of the chamber, and held the port-folio of the interior from June, 1816, to Dec. 28, 1818, when Decazes succeeded him. He often spoke, while in these stations, against the pretensions of the ultras, and their attacks upon the charter; but, after this period, he inclined more and more to the right side, and advocated the change in that law of election which he

had formerly defended. About this time, he was created peer. It must be mentioned, however, that he voted against the war with Spain, in 1823, opposed the unconstitutional toleration of the Jesuits by the government, and the arbitrary measures of the Villèle ministry. M. Lainé is a member of the French academy.

LAING, Alexander Gordon, was born at Edinburgh, in 1794, entered the army, served for several years in the West Indies, and, in 1820, was sent, with the rank of lieutenant and adjutant, to Sierra Leone. In 1821—22, major Laing was despatched on several missions from Sierra Leone, through the Timanee, Kooranko and Soolima countries, with the view of forming commercial arrangements. On the last of these journeys, he had reason to believe that the source of the Niger (q. v.) lay much farther to the south than Park (q. v.) had supposed. At Falaba he was assured he might reach it in three days, had not the Kissi nation, in whose territory it was situated, been at war with the Soolimanas, with whom he then resided. (See his *Journal*.) In 1826, he undertook to penetrate to Timbuctoo (q. v.), and started from Tripoli, crossing the desert by way of Ghadamir. On his journey, he was attacked by a band of Tuaricks, who wounded him severely, and left him for dead. He, however, recovered, and reached Timbuctoo August 18, where he remained upwards of a month. Several letters were received from him while there, stating that he had collected ample materials for the geography of this part of Africa. Being obliged to leave Timbuctoo by the sultan of Masina, into whose power the city had fallen, he hired a Moorish merchant to accompany and protect him, on his route by Sego to the coast. Three days after leaving the city, he was murdered by the person who had undertaken to guard him. The fate of his papers is uncertain. It has been suggested by English reviews (*Quarterly Review*, No. 84), that Rousseau, French consul at Tripoli, has become possessed of them. Caille gives a different account of his death. (See *Narrative of Discovery in Africa*, by Jameson, Wilson and Murray (Edinb. 1830), forming No. 16 of Harper's Family Library, New York, 1831.)

LAIRESSE. There was a family of Flemish painters of this name, of whom *Gerard*, son to the elder Lairese, has acquired by far the greatest reputation. He was born in 1640, at Liege. He is particularly distinguished by the high finish

with which his pictures are executed, and is considered the Raphael of the Dutch school; nor have any of his countrymen ever equalled him in historical painting. This talented artist was also a good engraver, and understood music scientifically, while of his literary abilities he has left a favorable specimen, in a treatise on the principles of his art. He survived the loss of his sight some years, and died, at length, at Amsterdam, in 1711. His book has been translated into English. His three brothers, *Ernest, John* and *James Lairese*, were artists of some note, the two former excelling in the delineation of animals, the latter in flowers. Two of his sons also followed the profession of their father, but with inferior ability.

LAIS; a celebrated courtesan, daughter of Timandra, the mistress of Alcibiades, born at Hyccara, in Sicily. She was carried away from her native country to Greece, when Nicias, the Athenian general, invaded Sicily. She began to sell her favors at Corinth for 10,000 drachmas, and an immense number of princes, noblemen, philosophers, orators and plebeians, did homage to her charms. The high price which she demanded of her lovers gave rise to the proverb of *Non cuius homini contingit adire Corinthum*. Even Demosthenes himself visited Corinth for the sake of Lais; but when he heard the courtesan name her price (a sum equal to about 1000 dollars), the orator departed, and observed that he would not buy repentance at so dear a rate. The charms which had attracted Demosthenes had no influence upon Xenocrates, although Lais (Phryne?), seeing the philosopher unmoved by her beauty, visited his house herself. Diogenes the cynic was one of her warmest admirers, and, though slovenly in his dress and manners, yet he gained her heart. Lais ridiculed the austerity of philosophers, observing that the sages and philosophers of the age were found at her door as often as the rest of the Athenians. The success which she met at Corinth encouraged her to pass into Thessaly, particularly to enjoy the company of a favorite youth called Hippostratus; but the women of the place, jealous of her charms, and apprehensive of her corrupting the fidelity of their husbands, assassinated her in the temple of Venus, about 340 years before the Christian era.—Pausanias mentions another Lais, likewise a courtesan.

LAIUS. (See *Œdipus*.)

LAKE. Lakes are large bodies of inland water, having no direct communication

with seas or the ocean, or communicating with them only by rivers, by which they pour out their superabundant waters. Some lakes have no issue, and receive no streams; but these are generally very small. Some have outlets, but receive no running waters; these are fed by springs which are thus obliged to fill up a basin before their waters can find their way downward towards the lower country. Others receive and discharge large rivers, and sometimes a chain of lakes are connected with each other, and with the sea, by a series of rivers. This is the case with the great lakes on our northern frontier, which are, in reality, a series of large basins or reservoirs, receiving the accumulated waters of the surrounding countries, and pouring them out through successive channels into other basins situated on a lower level. (See the articles *Superior, Huron, &c.*) Another class of lakes receive large streams or rivers, but have no visible or apparent outlet. The Caspian sea (q. v.), lake Titicaca, &c., are examples of this kind. These masses of water are sometimes drained by subterraneous streams, and are sometimes kept at their ordinary level by the ordinary process of evaporation. Some lakes are raised to a great height above the level of the sea. Lake Superior is 641 feet above the ocean. The waters of lakes are generally sweet, but there are some, such as the Caspian, &c., which are salt. All the great American lakes are of fresh water.

LAKE OF THE WOODS, or DU BOIS; a lake of North America, 70 miles long, and 40 wide. Large quantities of oak, fir, pine, spruce, &c., grow on its banks; hence its name. It contains a few small islands, and communicates with lake Winnipeg, which discharges its waters into Hudson's bay. Lon. 95° 20' W.; lat. 54° 36' N.

LALANDE, Joseph Jerome le Français de, one of the most distinguished astronomers of the last century, was born of a respectable family, at Bourg en Bresse, in France, July 11, 1732. Educated with a minute attention to religious duties, he displayed his abilities when very young, by composing sermons and mystical romances. The remarkable comet of 1744 first drew his attention to the heavenly bodies; and his taste for astronomy was fixed by the observations of father Beraud, mathematical professor at the college of Lyons, on the great eclipse of July 27, 1748. He wished to become a Jesuit, that he might devote himself entirely to study; but his friends, objecting to this

plan, sent him to Paris, where he studied the law, and was admitted an advocate. He became acquainted with Delisle, who had established an observatory in the house in which he resided, and obtained permission to assist him in his operations. He also attended the lectures on astronomy delivered by Messier, at the *collège de France*, and obtained the friendly patronage of Lemonnier, who lectured on natural philosophy at the same college. The academy sent him to Berlin to make observations for the purpose of determining the parallax of the moon, while Lalande went to the cape of Good Hope for the same purpose. At the sight of so young an astronomer (for he was scarcely 19 years of age), Frederic the Great could not conceal his astonishment. Lalande, however, proved himself worthy of the choice of the academy at Paris, and was not only received at court, but was made a member of the academy of Berlin. After having finished his operations at Berlin, he was chosen member of the academy of sciences in Paris, in the year 1753. Thenceforward no volume of their transactions appeared which did not contain some important communications from him; nor did he confine his labors to astronomical subjects merely. The French are indebted to him also for an edition of Halley's tables, as well as for the historical account of the comet of 1759. For the identifying of this remarkable comet, he presented to Clairault the deepest and most ingenious calculations. As the editor of the *Connaissance des Temps*, he entirely changed the plan and management of this useful work, and thereby set a good example to his successors. In 1761, he produced a chart, which showed the phases of the remarkable transit of Venus over the sun's disk for all places on the globe. In 1764, he published his *Astronomie*—a classical work, which was afterwards printed in three volumes quarto, and reached the third edition, and of which he made an abridgment (*Abrégé d'Astronomie*, published at Paris in 1795)—a work which cannot be too highly recommended to lovers of this science. In 1765 and 1766, he made a journey to Italy; a description of which (in 8 vols., 12mo.) contains much valuable information. He composed all the astronomical articles for the great *Encyclopédie*, and also wrote them anew for the *Encyclopédie méthodique*. In 1761, he succeeded his first instructor, Lemonnier, in the astronomical professorship of the *collège de France*, where he knew how to give to his lectures a peculiar

attraction. His lecture room was a kind of nursery, from which a multitude of his scholars were transplanted to the directorship and management of domestic and foreign observatories. His work *Des Canaux de Navigation et spécialement du Canal de Languedoc* (1778, folio) contains a general history of all the ancient and modern canals, which had previously been undertaken, accomplished, and even projected. Such a work had, till then, been a desideratum, and this is now of the greatest advantage to the engineer. His *Bibliographie astronomique* (1 vol., 4to.) is a copious catalogue of all the works that had ever appeared on the subject of astronomy. As he was a member of all the great academies, he formed, as it were, a common bond of union between them, while he communicated, from one to the other, whatever each one produced worthy of notice. His activity was remarkable. Lalande enjoyed for a long time a splendid reputation; but his imprudent freedom, the independence with which he expressed his opinion in the most turbulent times, the often offensive severity which he was accustomed to use against systems which deserved no notice, and the habit of publicly declaring his sentiments where he might better have been silent,—all this made him numerous enemies, who persecuted him, and succeeded so far, that his real merit has been called in question. His character was, in fact, a strange mixture of great and commendable qualities united with striking singularities, which may have proceeded from vanity and the desire to attract attention. Lalande, however, was kind, generous, full of feeling, and, in his own way, religious, although his enemies accused him of atheism. His death took place April 4, 1807.

LALLY, Thomas Arthur, count; a brave, but imprudent and unfortunate Irish officer in the service of France. He was of a family which had followed the fortunes of James II, and, having entered the French army, he signalized himself so much in the battle of Fontenoy, that he was made a brigadier-general on the field of battle. He also drew up the plan of a descent upon England, which would have been tried but for the defeat of Charles Edward at Culloden. In 1756, he was selected to restore the French influence in India, for which purpose he was made governor of Pondicherry. It was soon perceived, however, that he wanted the prudence, moderation and disinterestedness necessary for so

distant and critical a scene of action; and, after a little partial success against the English, in the first instance, he was finally obliged to retire to Pondicherry, which was besieged and taken by the British, January 16, 1761, the garrison, with Lally, being made prisoners of war. On this catastrophe, a torrent of invective assailed the unfortunate leader from all quarters, he having offended every body concerned, by his haughty humor, and violent temper and conduct. He was even accused of having sold Pondicherry to the English, notwithstanding the avowed hatred which, as a Jacobite, he felt for them. He arrived a prisoner of war in England, in September, 1761, and, the following month, was allowed to return to France, where, after a long imprisonment, he was brought to trial for treachery, abuse of authority, and unjust exactions. Being found guilty, he was condemned to be decapitated, which sentence was executed May 6, 1766, in the 68th year of his age. In 1778, his son, Lally-Tolendal, obtained possession of the estates of his father, with a revial of the proceedings, which were manifestly unjust, count Lally being one of the victims to public clamor, like admiral Byng, and many more who have been sacrificed to the unpopularity of an incapable administration.

LALLY-TOLLENDAL, Trophime Gérard, marquis of, son of the preceding, born at Paris, March 5, 1751, devoted himself to the military profession. He soon made himself known by his writings in defence of his father's memory, and embraced the cause of the revolution with alacrity, but, at the same time, with prudence. During the increasing popular excesses, he joined his friend Mounier in Switzerland. From hence he returned, but was arrested, and escaped almost by a miracle the massacre of September. He thereupon fled to England, and, while in that country, offered his services as the defender of Louis XVI, but was not accepted. After the 18th Brumaire, he returned to France, took an active part in public affairs under Louis XVIII, and was by him called to the chamber of peers, where he has often defended moderate principles with true eloquence. He is also a member of the French academy.

LAMA (in the Tangutanesse dialect, *mother of souls, pastor of souls*) is, among the Mongols, the appellation of all the members of the priestly order; but among the Calmucs it signifies only the more distinguished. Hence the religion of the Mongols

and Calmucs is called *Lamaism*. In this religion the Shigemooni is honored as the highest God, and the Dalai-lama (i. e. the great lama), as his representative. He is at the head of both ecclesiastical and secular affairs in Thibet, which may be considered as a theocratical state. He is considered not as a mere visible representative of the divinity on earth, but as a real divinity himself, dwelling among men. The belief in his eternal existence is connected with the doctrine of the transmigration of souls. His worshippers believe that the divinity, as soon as it leaves the body of the Dalai-lama, immediately takes possession of some other body in a supernatural way, so that he only changes his exterior form, and not his actual existence. Among a people who possess such a regular hierarchical system, it is a matter of small consequence who stands at the head. The usual residence of the Dalai-lama is in two monasteries situated in the vicinity of the capital, Lassa, in each of which he dwells alternately. He is surrounded in every direction by a vast number of priests; but no woman is permitted to pass the night in the building where he lodges. This arises, undoubtedly from the purity which is attributed to him; for he is called the *immaculate*. The natives, as well as a great crowd of foreigners (for all the Mongol tribes in Russia acknowledge him), undertake fatiguing pilgrimages in order to pay their homage to him, and obtain his blessing. He receives them sitting upon a kind of altar, upon a large and splendid seat, with his legs crossed. The Tartars, next to the inhabitants of Thibet, pay him the greatest reverence. They come to him from the most distant regions, and the princes, to whom he shows no more respect than to others, submit to the same ceremonies as their people. He salutes no one, never uncovers his head, rises up before no one, and is satisfied with laying his hand upon the head of his worshipper, who believes that he has thereby obtained the pardon of his sins. His worshippers believe that the supreme divinity lives in him, that he knows and sees every thing in the deepest recesses of the heart, and never needs to make inquiry in regard to any thing. If he does this, it is only that unbelievers and the evil-minded may not have cause for complaint. He sometimes distributes, it is said, little balls of consecrated dough, which the Tartars use in many superstitious practices; but it is not true, that balls made from his excrement are distributed,

preserved in golden boxes, and even mixed with articles of food. His power was once greater than it is now, and he appointed and deposed the khans; but he is now more dependent on the emperor of China, although the latter, in a religious respect, is subjected to him. Two Chinese mandarins, with a garrison of 1000 Chinese, are maintained in his capital, and, in the palace at Peking, the Chinese emperor supports a subordinate lama, who is sent as a nuncio from Thibet. When the Dalai-lama dies, it is then necessary to discover where his spirit has chosen to be born anew. In this case, all must submit to the opinion of some of the lamas, who alone are acquainted with the signs by which he may be known, or, rather, who know what child the deceased has appointed for his successor. The worshippers of the lama are divided, in general, into two sects, known by the titles of the *yellow* and *red caps*. Each sect is under three lamas; the former is under the Dalai, Teeshoo or Bogao, and Taranaut lamas; the latter, under the three shammas. The Dalai-lama is the most distinguished of all, and next to him is the Teeshoo-lama, who dwells at Teeshooloomboo, 10 days' journey from Lassa. The three shammas dwell in separate monasteries, the most distinguished of which is at Tassasudon, the capital of Bootan. Subordinate to them are numerous priests of different ranks, who are held in great respect, who superintend instruction, and some of whom live in a state of celibacy, according to certain rules, similar to those of the Christian monks. At Lassa alone there are 3000 monasteries. The religion of the lama sprung up in Thibet, and knows no eternal, self-existent being. Their idols or Boorchans, 108 in number, are created beings, who ascended into the rank of gods before the present world was created, on account of their holiness. Shigemooni, the chief object of worship, appeared in the world for the last time 1000 B. C., and instituted Lamaism, and now rules the world in its present state of misery. The earth is inhabited by degenerate spirits from the upper world. The human soul, after it has been subjected to a state of trial, and has passed a good or bad life, enters upon a higher or lower condition. This doctrine renders the worshippers of the lama benevolent and moral. Their idol worship consists in clamorous songs and prayers, accompanied with loud music, in splendid and festive processions, and in the solemniza-

tion of certain festivals at fixed times, together with pilgrimages and personal castigations.

LAMA, in zoölogy. (See *Llama*.)

LA MAR, José, was born at Guayaquil, and is therefore accounted a Peruvian, although his birthplace now belongs to Colombia. He was educated in Spain, and served in the peninsula in the early part of his life. In 1793, he was out in the campaign of Roussillon, as lieutenant in the Sabaya regiment. In 1808, he had attained the rank of major, and signalized himself as one of the heroic defenders of Saragossa. Afterwards he commanded a grenadier column in Valencia. While confined in the hospital of Tudela by his wounds, he was included in the capitulation of Blake's forces, and was conveyed to France as prisoner of war, but constantly refused to give his parole. In 1813, he eluded the vigilance of his guard, and effected his escape, and, on arriving at Madrid, was raised to the rank of brigadier. In 1816, he returned to America with the appointment of inspector-general of the army in Peru. Whilst employed there as governor of the castles of Callao, he was compelled by the patriots to capitulate, and afterwards sent in his resignation to the viceroy. Subsequently to this period, he became actively engaged in the cause of his country, and of the insurgent patriots, who had esteemed the refinement of his character and feelings, and the purity of his principles, even while he belonged to the royalist party. As evidence of this, he was elected president of the *junta gubernativa* of Peru. In 1823, Riva-Aguero was proclaimed president of the republic, and La Mar took the command of the Peruvian division of the liberating army under Bolivar. La Mar acted in this capacity at the battle of Ayacucho, and ably seconded general Sucre on that decisive day. During the period of Bolivar's arbitrary government of Peru, we hear little of La Mar, who would not accept of office in the circumstances of the times; but the revolution of January, 1827, again brought him into notice, and he was elected president of the republic by the constituent congress, in June, being much beloved and respected in Peru, where he had few political and no personal enemies.

LAMARCK, Jean Baptiste Antoine Pierre Monet, chevalier de, was born in the year 1745, in Picardy, of a noble family, and was compelled, on account of an accident, to abandon the service, and devote his attention to study. He applied himself at

first to medicine; afterwards, in consequence of hearing Jussieu's illustrations of botany, was led to the study of natural science. Jussieu, on a botanical excursion, in which Lamarck accompanied him, had intimated that the old method of instruction in this department left much to be wished for, and Lamarck determined to remedy this deficiency. He labored with great diligence on a treatise in which he showed the defects of the old system, and proposed a new one himself, which met with universal approbation. He then applied his new system to the plants of France, and delivered to the academy his *Flore Française, ou Description succincte de toutes les Plantes que croissent en France*. This work was printed, by the recommendation of the academy, at the expense of the government, for the benefit of the author (1780, under the date of 1778, in three volumes; 2d edition, 1793; and the third, enlarged and revised by Decandolle, in 1805). Lamarck now turned his whole attention to this science, and made several botanical excursions to Auvergne and into Germany, in the last of which he was accompanied by the son of the great Buffon. On his return to Paris, he undertook the botanical department of the Encyclopædia, which Panckoucke was publishing, and applied himself to this task with such assiduity, that, in 1783, he produced the first half of the first volume, with an introduction, containing a sketch of the history of the science. He published the second volume in 1788. But a dispute between him and the publisher, in regard to the admission of certain articles, brought the undertaking to a stand, and there ended Lamarck's botanical career. Many of his botanical treatises were published in the *Memoirs of the Academy*, and in the *Journal d'Histoire naturelle*, edited by him, together with the abbé Haüy, Fourcroy, Bruquière, Olivier and Pelletier, which make us regret that their author ever abandoned this branch of science. At the breaking out of the revolution, he was the second professor in the royal *jardin des plantes*; but, in consequence of new arrangements, he was made professor in the department of zoölogy, in which he was soon as much distinguished as he had been in botany. His *Système des Animaux sans Vertèbres, ou Tableau général des Classes, des Ordres et des Genres de ces Animaux* (1 vol., Paris, 1801), his *Philosophie zoölogique*, and his *Histoire naturelle des Animaux sans Vertèbres*, are his principal works in this department of science. Lamarck's comprehensive mind was also directed towards

physics, and he published, in 1794, *Recherches sur les Causes des principaux Faits physiques*, in which he exposes many false theories in this science. With the same view, he also wrote his *Refutation de la Théorie pneumatique, &c.*, which appeared at Paris in 1796. He collected his meteorological observations in his *Annuaire météorologique*, which first appeared in 1799, and was continued to 1809. Lamarck is now a member of the institute, and there are several plants to which his name has been given.

LAMARQUE, Maximilian, was born at Saint-Sever, of rich and respectable parents, and, in 1792, entered the army as a private soldier, choosing to obtain promotion only by merit, and became captain of grenadiers in the celebrated corps of Latour d'Auvergne, known under the title of the *infernal column*. He was in the vanguard of the army of the Pyrenees, in 1793, under the command of general Moncey, and received, February 3, two severe wounds, while, with a single company, he was sustaining the attack of a column of the Spanish army, that endeavored to turn the French division. He afterwards marched against Fontarabia, at the head of 200 grenadiers, and precipitating himself into the moat, drew down the drawbridge, and gained possession of the place. Eighty pieces of cannon and 1800 prisoners were the fruit of this *coup-de-main*, which procured Lamarque, then but 20 years old, the rank of adjutant-general. In 1801, he was made general of brigade, and distinguished himself at the battle of Hohenlinden. He then served in Spain, and in the campaign of 1805, so brilliantly terminated by the battle of Austerlitz. He was soon afterwards sent to Naples with the army under the command of Joseph Bonaparte, and, in crossing the mountains on the Neapolitan frontier, with 8 soldiers, was attacked by a band of 50 robbers, under the orders of the ferocious Fra-Diavolo, against whom he successfully defended himself. He was sent, in 1807, against the insurgents of Calabria, and, near Maratea, defeated a body of 1200 English that were sent to support them. He took the town, and made 1800 prisoners, which exploit gained him the rank of general of division. He was employed by Murat in 1808, and took the island of Caprea from the English, which was considered impregnable, and was defended by a garrison superior in numbers to the assailants. He afterwards joined the army in Germany, and, at the battle of Wagram, had four horses killed under him. He served in

Russia and in Spain in 1812, and, after the evacuation of the Peninsula, returned to France, and was created a knight of St. Louis, July 27, 1814. On the return of Napoleon, he was appointed to the first military division, as commander-in-chief of the army of the Loire. In his operations against the insurgents of La Vendée, he distinguished himself not less by his forbearance and humanity than by his decision, and, after obtaining some successes at La Roche-Serviere, he effected a pacification at Chollet. After the return of the Bourbons, he was comprised in the second article of the law of July 24, 1815, and retired to Saint-Sever, under the inspection of the minister of police. He afterwards took refuge at Brussels, but was ordered from thence by the king of the Netherlands, upon which he passed into Austria. In 1815, he published a Defence of General Maximilian Lamarque, in a manly, bold and candid tone. In 1818, he was permitted to return to France, and, in 1820, produced an able pamphlet On the Necessity of a Standing Army. General Lamarque has since been a conspicuous member of the chamber of deputies, and, in the late revolution in France, zealously adopted popular principles.

LAMARTINE, Alfonse de, one of the most distinguished lyric poets of France, established his reputation by his *Méditations poétiques*, which he published when he was 20 years of age (9th edition, with vignettes by Mendoz, Paris, 1822). He describes therein the ancient court of the Bourbons as a mirror of morality, honor and chivalry. His poems are distinguished by depth of thought and feeling, and also by their beautiful language. With regard to the spirit of his poetry, Lamartine is rather to be compared to the British than the French. An often gloomy melancholy, a longing lost in sorrowful musing, an inclination for the mystical and supernatural, and a great predilection for poetical landscape-painting, form the peculiar characteristics of this poet, who, nevertheless, often descends into an artificial and prolix style, and sometimes runs into the bombastic. His versification is easy. His *Mort de Socrate* (Death of Socrates), which appeared in 1823, was not so successful, although there are many beautiful passages scattered here and there throughout the work. The plan of this poem seems not to have been properly matured; the language, too, is unequal, and the versification sometimes neglected. But the young poet has again shown himself bold, elevated and imaginative, in his

Nouvelles Méditations poétiques, which appeared at Paris in 1823. The mystical tone and foreign style of Lamartine, in which Young and Byron were his examples, displeases the classical school of France; but his deep earnestness is the characteristic in which the light and superficial poetry of the French has hitherto been deficient. One of the last poems in this collection is inscribed to Bonaparte. Among the finest pieces in the volume, are the Crucifix, To the Past, the Dying Poet, and Freedom. From these and similar poems, it would seem, that the study of the romantic in the German and British poets has diverted the enthusiastic and susceptible mind of the young Lamartine from the poetical track customary in France since the time of Boileau. Lamartine has expressed his abhorrence for revolutionary freedom in his *Lettre à Monsieur Casimir Delavigne* (1824, and also in his *Epîtres*, Paris, 1825), who had sent him his *Ecole des Vicillards*. Delavigne replied, in an equally beautiful epistle, which defends the worship of reason and civil freedom. (Delavigne was at that time librarian of the duke of Orleans.) The tone in which the political opponents and poetical rivals corresponded with each other is worthy of imitation. In 1825, Lamartine was appointed secretary to the French legation at Florence, where, on account of a passage in his poems, which related to Italy, he was engaged in a duel with colonel Gabriel Pepe. About the beginning of 1830, he was made a member of the French academy.

LAMBERT, John Henry, an eminent mathematician and astronomer, was born at Muhlhausen in the Sundgau, a town then in alliance with the Swiss cantons, August 29, 1728. His father was a tailor, in humble circumstances, who intended him for his own business; but, being sent to a public school, he so distinguished himself, that an attempt was made to provide him with the means of studying theology, which, however, proved unsuccessful, and he was obliged to follow his father's employment. In this situation, he spent the greatest part of the night in study, and, obtaining an old mathematical treatise, discovered so much ardor and ingenuity, that several learned men were induced to instruct him gratis. He acquired a knowledge of mathematics, philosophy and the Oriental languages in his native place. He afterwards became clerk to some iron works, and amanuensis to M. Iselin of Basle, who conducted a newspaper, and became his sincere and constant friend. In 1748, this

gentleman recommended him to baron Salis, president of the Swiss convention, to become tutor to his children; and, aided by the excellent library of his new patron, and the scientific intercourse which he met with in his circle, he enlarged the sphere of his acquirements in an extraordinary degree. After living eight years at Coire, during which period his talents as a philosopher and mechanic were rendered manifest by various scientific compositions and inventions, he repaired, in 1756, with his pupils, to Göttingen, and soon after published his first separate work, entitled *De la Route de la Lumière par les Aïrs*. In 1758, he visited Paris with his charge, and became acquainted with D'Alembert and Messier. In 1759, he went to Augsburg, where he published his celebrated work *On Perspective*; and in the following year appeared his *Photometry*, by which he added a new branch to the science of mixed mathematics. In the three or four following years, he published *Letters on the Construction of the Universe*; a *Treatise on the principal Qualities of the Orbits of the Comets*; *New Organon*. In 1764, he visited Berlin, and was introduced to Frederic the Great, who admitted him a regular member of the academy of that capital—an appointment which enabled him to devote himself wholly to his favorite studies. He enriched the transactions of various societies with his papers and treatises, all of which bear the stamp of eminent and original genius. Most of his mathematical pieces were collected, in three volumes, by himself. His death took place Sept. 25, 1777, in his 49th year, owing to a decline, produced by over-application. Lambert forms one of the most conspicuous examples on record of the mastery which great genius and energy will sometimes exert over untoward circumstances. In mathematics, logic and metaphysics, he was highly distinguished. He was accustomed to labor from five in the morning till midnight. He discovered the theory of the speaking trumpet. Philosophy, and especially analytic logic, are greatly indebted to him for his *Novum Organon*, or *Thoughts on the Examination and Relations of Truth* (Leipsic, 1764, 2 vols.), and his *Architektonik*, or *Theory of the first simple Principles in philosophical and mathematical Knowledge* (Riga, 1771, 2 vols.).

LAMBETH; a village in Surry, England, on the borders of the river Thames, opposite to Westminster; population, 57,638. Here is a palace belonging to the archbishop of Canterbury, a very large pile

of building, and containing a library of 25,000 volumes, and upwards of 1200 manuscripts. The kings of England, down to Henry VII, often resided at Lambeth, in a palace which no longer exists.

LAMEGO; a city of Portugal, in Beira, in a plain near the Duero, surrounded by mountains; 36 miles E. of Oporto; lon. 7° 27' W.; lat. 41° 7' N.; population, 9000. It contains two cathedral churches, a hospital, four convents, a theological seminary, and a library. In this town the estates assembled (1144) to confirm the election of Alphonso Henriques, first king of Portugal, and enacted the fundamental laws of the kingdom. (See *Portugal*.)

LAMENTATIONS. (See *Jeremiah*.)

LAMETTRIE, Julien Offray de, a materialist and medical charlatan, was born at St. Malo, in 1709, and studied medicine in Holland, under Boerhaave. He then went to Paris, where the duke de Grammont, colonel of the guard, appointed him physician to his regiment. He followed his patron to the siege of Freyburg, and was here taken dangerously ill. He believed that the spiritual power, which is called the soul, perishes with the body, and wrote a *Histoire naturelle de l'Ame*. This work, which every where breathes the grossest materialism and skepticism, procured him many enemies, and was burned by the executioner, at the command of parliament. On the death of his patron, he lost his place. He now turned his arms against his Parisian colleagues, and wrote, under the signature Aletheius Demetrius, his satire of *Pénélope ou Machiavel en Médecine* (Berlin, 1748), on account of which he was obliged to fly to Leyden. Here he published his *L'Homme Machine*. The philosophy of the author consists in constant assumptions of what he is attempting to prove, imperfect comparisons or analogies instead of proofs, some just observations from which general conclusions are illogically drawn, and assertions instead of doubts. Being persecuted in Holland, where his book was condemned to the flames, he went to Berlin, in 1748, and was made a reader to the king, and a member of the academy. He died in 1751, of a fever, which he treated after his own absurd views. The king of Prussia himself wrote his *éloge*, which was read in the academy. We find, in the works of Lamettrie, spirit and a brilliant imagination, but little judgment, accuracy or taste. His philosophical writings appeared at Berlin, in 1751, in 2 volumes. His writings, besides the abovementioned,

are *L'Homme Plante*, *L'Art de jouir*, *Le Discours sur le Bonheur*, and others. In the latter work, Lamettrie is, according to Diderot, an author without judgment, one who confounds the ills of the wise and good with the torments of the wicked, and the slight evils of knowledge with the destructive consequences of ignorance—who betrays his frivolity in what he says, and the corruption of his heart in what he dares not speak out—who in one place asserts that man is evil by nature, and elsewhere derives man's duties and his happiness from the nature of his being—who seems to labor to console the criminal in his crimes, the vicious in his vices—and whose gross sophisms, dangerous on account of the jests wherewith he seasons them, betray a man ignorant of the very rudiments of moral philosophy. Voltaire, who had at first favored him, retracted his encomiums. On his death bed, Lamettrie manifested strong marks of penitence.

LAMIA; the name of an Athenian courtesan, celebrated for the charms of her person and the brilliancy of her wit. She was, by profession, a flute-player. Hearing that her favorite instrument was carried to great perfection in Egypt, she travelled into that country, where she became the mistress of Ptolemy Soter. On the defeat of that prince by Demetrius Poliorcetes, about three centuries before the Christian era, Lamia fell into the hands of the conqueror, over whom, the handsomest man of the age, she soon acquired a complete ascendancy. Her influence procured from Demetrius great concessions in favor of her countrymen, the Athenians, who, in their gratitude, went so far as to raise a temple to her honor, under the denomination of Venus Lamia. Plutarch and Athenæus both bear ample testimony to the qualities of her mind; and, if the antique engraving on an amethyst, in the king of France's collection, give a true portrait of her features, her beauty is still less questionable. The exact time of her decease is uncertain.

LAMIE; certain monsters of Africa, who had the face and breasts of a woman, and the rest of the body like that of a serpent. They allured strangers to come to them, that they might devour them; and, though they were not endowed with the faculty of speech, yet their hissings were pleasing and agreeable. Some believed them to be witches, or rather evil spirits, who, under the form of a beautiful woman, enticed young children and devoured them. According to some, the fable of

the Lamia is derived from the amours of Jupiter with a certain beautiful woman called Lamia, whom the jealousy of Juno rendered deformed, and whose children she destroyed; upon which Lamia became insane, and so desperate that she ate up all the children that came in her way. These beings are also called *Lemures*. (q. v.)

LAMIAN WAR; a war carried on by the troops of Antipater (323 B. C.), after the death of Alexander, when the Greeks rose against Leonatus, who retreated to the fortress of Lamia, in Thessaly. The consequence of this war was the abolition of the Grecian democracies, and the reception of Macedonian garrisons into the cities. Athens was also obliged, to conclude a peace, to give up Demosthenes and Hyperides, the orators who had instigated them to this war. Demosthenes destroyed himself by poison.

LAMOIGNON. (See *Malesherbes*.)

LAMOTTE VALOIS, countess of, rendered notorious by the affair of the necklace, represented herself as the descendant of the family of Valois, by an illegitimate child of Henry II. Until the affair of the necklace, she had lived in misery and contempt, although she had employed all the arts of immorality and intrigue, to procure for herself rank and wealth. Being thus known to a great part of the nobility of Versailles and Paris, she astonished all who were acquainted with the circumstances of her fortune, when, in 1784, she suddenly began to display an extravagance which could only be supported by great wealth. An intrigue soon became notorious, which attracted the attention of all Europe. The prince Louis de Rohan (q. v.), cardinal bishop of Strasburg, and grand almoner, had fallen into disgrace, of which the reasons were not very satisfactorily known. The countess of Lamotte, informed of the desire of the cardinal to recover favor at court at any price, had falsely represented to him, that the queen, with whom she pretended to have a great, though secret influence, wished to possess a costly necklace, which was offered for sale, but at that time was not able immediately to advance the sum requisite for the purchase. If, therefore, he would purchase the necklace in his own name, and allow the queen to repay him by instalments, he would by so doing regain favor. The cardinal fell into this snare, purchased the necklace, and gave it to the countess of Lamotte, to be delivered by her to the queen. A bond, forged by the countess, was then given him for his security, set-

ting the conditions of payment. In order to deceive the cardinal the more perfectly, the countess had concerted with a woman who was privy to the plot, that she should appear to him under the mask of the queen, in August, 1784, in the gardens at Versailles, and present him a box containing a rose and the queen's portrait. The time when the cardinal had promised to pay for the necklace now came, and, as he did not possess money sufficient for the purpose, he informed the jewellers, that the necklace was purchased for the queen. The jewellers, after waiting a long time without obtaining their money, applied to the king, and thereby gave a clew for the detection of the fraud. By the sentence of parliament, the deceived cardinal was acquitted, and the countess of Lamotte, convicted of having embezzled and sold the necklace, was sentenced to be branded, scourged, and perpetually imprisoned. After nine months, she escaped confinement, and fled to England, where, in conjunction with her husband, who had there sold the necklace, she published a pamphlet against the court of Versailles, and particularly against the queen. Vilette and Cagliostro, who had taken part in the deception, were banished the kingdom. The countess was found, after a nocturnal revel, precipitated from a third story window upon the pavements of London.

LAMP. The invention of lamps is ascribed to the Egyptians. In the festivals in honor of Minerva, at Sais, in Lower Egypt, great numbers of lamps were kept burning. They were known even in the times of Moses and Job. The Egyptians were also the first who placed burning lamps in the tombs with their dead, as an emblem of the immortality of the soul. From Egypt, the use of lamps was carried to Greece, where they were also consecrated to Minerva, the goddess of learning, as indicative of the nightly studies of the scholar. From Greece, the use of lamps passed to the Romans. The first person who is known to have published a collection of ancient lamps, is Fortunio Liceto, an Italian, whose chief design appears to have been to prove the possibility of the existence of inextinguishable, or, rather, perpetually-burning lamps. Pietro Santo Bartoli, a countryman of his, afterwards published at Rome, in the year 1691, the collection of Bellori; but these engravings are exceedingly ill executed and unfaithful. Passeri, however, another Italian, published, at the suggestion of the academy

of Pesaro, a collection of 322 lamps which he possessed in his museum. The above-mentioned collections, however, have been much surpassed in beauty and interest by that of Portici. The sixth hall of that museum is entirely filled with lamps and candelabras discovered in the houses of Pompeii and Herculaneum. Representations of these were published in 1792, in 93 copper-plates, exclusive of vignettes. They form the ninth volume of the *Antiquities of Herculaneum*. We find there represented and explained upwards of two hundred lamps and candelabras of bronze and terra-cotta. The ancients appear to have very early acquired the practice of using lamps. The use of oil was not perhaps known to the Romans in very remote ages, although the Greeks, unquestionably, were acquainted with it, as appears from several passages in Herodotus. We find, indeed, the figure of the lamp sculptured and engraved on many of the most ancient Greek vases. It is with a lamp that Mercury, as depicted on one of these, lights Jupiter, who is represented scaling with a ladder the chamber of Alcmena. Baked earth was the substance of which the earliest lamps were composed, but subsequently we find them of various metals—of bronze more particularly. A few ancient lamps of iron are also extant; but these are rare, either because that metal was little used for the purpose, or on account of its more ready destruction in the ground. There are four specimens in the museum of the king of Naples, at Portici, where there is likewise one specimen of a lamp of glass. It is entirely solid, and in one single piece. Pausanias mentions a golden lamp in the temple of Minerva, and St. Augustine speaks of lamps of silver. No antique of either kind, however, has reached modern times. The testimony of Pliny, St. Augustine, and others, has led to the belief that the ancients had perpetual lamps, and Liceto has composed his work to establish this supposition. Different authors mention instances of lamps, which, in modern times, have been found burning in ancient sepulchres, but were extinguished as soon as the external air was admitted. The most famous instance is that of the tomb of Tulliola, daughter of Cicero, discovered at Rome, in 1540. None of these instances, however, can be considered as proved. The idea probably arose from the inflammation of the hydrogen gas contained in these caverns, when explorers entered them with torches. The

lamps or candlesticks made use of by the Jews, in their own houses, were generally put into a very high stand on the ground. The lamps supposed to have been used by the foolish virgins, &c., in the gospel, were of a different kind. According to critics and antiquaries, they were a sort of torches made of iron or potter's earth, wrapped about with old linen, and moistened, from time to time, with oil. (*Matt.* xxv, 1, 2.) The lamps of Gideon's soldiers were of the same kind. The candlestick, with seven branches, placed in the sanctuary by Moses, and those which Solomon afterwards prepared for the temple, are said to have been crystal lamps filled with oil, and fixed upon the branches. Among the Romans, also, it was customary to have the lamp either depending from the ceiling, or placed on a stand in the room, since the use of tables was not common to them, and their attitude, in studying, as well as at their repasts, was a half-recumbent one, holding their scroll or tablets before them on their knees. These stands were often highly ornamented. The most common form of them was a tripod with lion's feet, from which sprung sometimes the shaft of a column, according to one of the orders of architecture, the disk placed to receive the lamp forming the capital. These vessels were generally ornamented with mythological or allegorical subjects, and their shape varied greatly. Sometimes it was a simple disk with a hole in the circumference, through which to pass the wick, and another in the middle, to pour the oil into. At other times, they presented the appearance of a boat. Occasionally their extremity terminated in two or three divisions, according to the number of beaks; but it would be endless to attempt to pursue these details. Inscriptions were likewise often found placed upon them. Public illuminations on occasions of national rejoicing were common to the Romans. On the birth-days of their princes, on great religious solemnities, &c., they suspended lamps at the windows. Juvenal and Persius both make mention of this usage. Various motives have been assigned for the ancient practice of placing lamps in sepulchres. One of the most ingenious, and perhaps the most satisfactory, is that it was allegorical of the cessation of mortal life—of the separation of the soul, which the ancients regarded as an emanation of fire. On some sepulchral lamps we find sculptured the figure of the butterfly, in allusion, no doubt, to the equally cheerful

and elegant imagination of the escape of the spirit, in a more aerial semblance, from its chrysalis state. The early Christians adopted, in their monuments, this pagan usage, together with many others, and the lamp has been found in the tombs of saints and martyrs, and of distinguished men who embraced Christianity. In these instances, it was, no doubt, meant still more to be illustrative of that divine flame by which they were inspired, and whose inward light guided them through the many savage persecutions suffered by the primitive followers of our holy faith. The shapes of ancient lamps, as well as many other ancient utensils, have been imitated with much success by Mr. Wedgwood. The principal works to be consulted on the subject of lamps are those already quoted, of Liceti, of Bellori, and of Passeri; *Antichità d'Ercolano*, volume 9 (Lucerne); a *Dissertation sur une Lampe antique trouvée à Munich en 1753*, written by the prince de St. Severe on the question of inextinguishable lamps; and the preliminary remarks to the description of two antique lamps found at Nismes, in vol. 2d of Millin's *Monumens Inédits*. The best lamps now in use are those invented by Argand, at Geneva, in 1784. The principle on which the superiority of the Argand lamp depends, is the admission of a larger quantity of air to the flame than can be done in the common way. This is accomplished by making the wick of a circular form, by which means a current of air rushes through the cylinder on which it is placed with great force; and, along with that which has access to the outside, excites the flame to such a degree, that the smoke is entirely consumed. Thus both the light and heat are prodigiously increased, the combustion being exceedingly augmented by the quantity of air admitted to the flame; and what, in common lamps, is dissipated in smoke, is here converted into a brilliant flame. This lamp is now very much in use, and is applied, not only to the ordinary purposes of illumination, but also to that of a lamp furnace for chemical operations, in which it is found to exceed every other contrivance yet invented. It consists of two parts, viz. a reservoir for the oil, and the lamp itself. The Argand burner is constructed by forming a hollow, cylindrical cavity, which receives oil from the main body of the lamp, and, at the same time, transmits air through its axis, or central hollow. In this cavity is placed a circular wick, attached, at bottom, to a

movable ring. This ring is capable of being elevated or depressed by means of a rack and pinion, or more commonly by a screw; so that the height of the wick may be varied to regulate the size of the flame. On the outside, is placed a glass chimney, which is capable of transmitting a current of air, on the same principles as a common smoke flue. When this lamp is lighted, the combustion is vivid, and the light intense, owing to the free and rapid supply of air. The flame does not waver, and the smoke is wholly consumed. The brilliancy of the light is still further increased, if the air be made to impinge laterally against the flame. This is done either by contracting the glass chimney near the blaze, so as to direct the air inwards, or by placing a metallic button over the blaze, so as to spread the internal current outward. The Argand lamps are called, in France, *lampes à Quinquet*, or, more briefly, *Quinquets*, from an artist of the name of *Quinquet*, in Paris, with whom Argand was connected. To avoid the shade occasioned in common lamps, by the reservoir for the oil being under the flame, various contrivances have been introduced, in which the reservoir is placed at a distance from the flame. In the *astral* and *sinuambal* lamps, the principle of which was invented by count Rumford, the oil is contained in a large horizontal ring, having a burner at the centre, communicating with the ring by two or more tubes placed like rays. The ring is placed a little below the level of the flame, and from its large surface affords a supply of oil for many hours. A small aperture is left for the admission or escape of air, in the upper part of the ring. When these lamps overflow, it is usually because the ring is not kept perfectly horizontal, or else because the air-hole is obstructed—a circumstance which may even happen from filling the lamp too high with oil. (For an account of Davy's safety lamp, see *Damps*.)

LAMPADOPHOROI (Gr. *λαμπα*, a torch, and *φερω*, to carry). In the torch-races of the ancient Greeks, the successful competitor was called *λαμπαδοφορος*, and the race itself, *λαμπαδοδρομια*. These races took place in Athens, at the *Vulcanalia*, *Promethea*, *Panathenæa*, and some other festivals. The runners were three youths. It was decided by lot who should begin. He commenced his race, and, if his torch was extinguished before he reached the goal, he gave it to the second, and this one, in a similar case, to the third. He who carried the torch burning to the goal was the victor (*λαμπαδοφορος*). If a

youth ran too slow, in order to avoid extinguishing his torch, the spectators drove him on by beating him with the open hand. The poets often allude to the delivery of the torch from one to the other.

LAMPBLACK. (See *Carbon*.)

LAMPREY (*petromyzon*). This fish has a long and slender body, resembling that of the eel. The skin has no scales, but is covered with a glutinous mucus. The sea-lamprey, which is sometimes the largest species, grows to a very large size, having been seen of five or six pounds weight. Its color is dusky, irregularly marked with dirty yellow. In the mouth are placed 20 rows of small teeth, disposed in circular order, and placed far back near the throat, four, five and six in each row. The *branchiæ* are situated within seven apertures that exist on each side of the neck. This fish, as its name indicates, possesses the power of sucking and adhering to stones. The mouth is of a round form, resembling that of a leech, and, like that animal, it can adhere to any substance with great firmness. The sea-lamprey, although properly an inhabitant of salt water, like the salmon and other marine fish, is found at certain seasons of the year in rivers. The lamprey was at one time considered as a great delicacy by the English; and a surfeit on them caused the death of Henry I. In the reign of Henry IV, so highly were they esteemed, that protections were granted to such vessels as might bring them in; and his successor issued a warrant to William of Nantes, for supplying him and his army with this article of food, wherever they might happen to march. The lamprey is still considered as a delicacy at certain seasons of the year, but has lost much of its value as an article of food. During cold weather, this fish conceals itself in the crevices of rocks; and it is a usual expedient with anglers to form pits extending to the water side in the vicinity of its haunts; into these a little blood is thrown, to induce the lamprey to come forth, when it is readily taken. The lamprey, so celebrated among the epicures of ancient Rome, appears to have been a fish of another genus—the *muræna*, or *murenophilis*. This fish, with the bass (*lupus*), and a species of mullet (*myxo*), formed the pride of Roman feasts—the *tripatinum*. (See *Pliny*, *lib. 35, cap. 12*.) These lampreys were reared with the greatest care, and at an enormous expense, in artificial fish-ponds. Pliny gives some curious details on this head; he says, Lu-

cullus formed a fish-pond, near Naples, of such size, that the fish it contained, after his death, sold for 4,000,000 of sesterces (\$170,000); but Hirrius was the first to build a pond for lampreys alone. On one occasion, when Cæsar gave an entertainment to the people, Hirrius furnished him with 6000 of these fish. They also appear to have been kept as pets; thus the celebrated orator Hortensius wept bitterly at the death of a favorite lamprey, and Antonia, the wife of Drusus, ornamented one with jewels. The bite of the *muræna* was deemed so poisonous by the fishermen, that they adopted great caution to prevent its effects, seizing the animal by the head with a forceps, and rubbing its snout against some hard substance to destroy its teeth, and beat it on the tail, where (as is now supposed with regard to eels), it was thought that the life resided. There are several other species of lampreys and *murænas*, some of which inhabit our coasts and rivers, for information on which we refer to doctor Mitchell's paper on the *Fishes of New York* (New York Phil. Trans.), and Mr. Lesueur's on *American Murænas* (Jour. Acad. Nat. Sci.).

LANCASTER, sir James, an early English navigator, made a voyage to America in 1591, afterwards sailed round the cape of Good Hope, and visited Ceylon and Pulo Penang. In 1594, he engaged in a predatory expedition to South America; in 1600, went with a fleet to the East Indies, formed a commercial treaty with the king of Achen, and established a friendly correspondence with the state of Bantam, in the island of Java. Lancaster, in his last voyage, procured some information relative to a north-west passage to the East Indies, which occasioned the subsequent expeditions of Hudson and others. Baffin gave the name of *Lancaster's sound* to an inlet which he discovered in 74° of north latitude. (See the collections of Hakluyt (vol. iii), and Purchas (vol. i), and the article *Polar Expeditions*.)

LANCASTER, Joseph, the promulgator of the system of mutual instruction, may be regarded as one of the most useful men of his age. He was born in 1771, was bred a Quaker, and still maintains the habits and manners of that persuasion. It has been made a subject of dispute whether doctor Bell or Mr. Lancaster is the inventor of the system of mutual or monitorial instruction. The facts in the case seem to be these: the reverend doctor Bell, an English chaplain in the East Indies, practised a system of mutual instruction, in Madras, which he found, at least in part.

already in existence among the natives. On his return to England, in 1797, he published a pamphlet (*Education pursued in the Madras Asylum*) giving some account of the method and his experience. A few years after, Lancaster began to apply the method, and introduced some improvements, enabling him to manage and teach a greater number of children than had previously been attempted. It is evident that neither of these gentlemen can be strictly called the inventor of the system, although both are entitled to great praise for the improvements which they introduced. It has, in fact, been long in use among the Oriental nations. Doctor Bell, as we have mentioned, borrowed it from the natives in Hindostan, and Shaler (*Sketches, &c.*) speaks of it as employed in Algiers. To Lancaster, however, is due the nobler praise of having disinterestedly devoted himself to the task of diffusing a knowledge of this plan of instruction in two worlds. He began his labors in England, in 1803. The object was at first to procure a cheap means of instruction for the poorer classes, who, it is well known, were then unprovided for in most countries of Europe. Lancaster received great encouragement from many persons of the highest rank in England, which enabled him to travel over the kingdom, delivering lectures, giving instruction, and forming schools. Flattered by splendid patronage, and by promises of support which were never realized, he was induced to embark in an extensive school establishment, at Tooting, to which his own resources proving unequal, he abandoned his establishment, and threw himself on his own talents, and on the liberality of the public at large; but, being disappointed in his expectations, and unwilling to submit to prescribed terms, which he considered as implying some fault on his part, when no fault really existed, he left England in disgust, and, about 1820, visited America. He had previously published *Improvement in Education* (1803); a *Letter on the best Means of Educating and Employing the Poor in Ireland* (1805); *Outlines of a Plan for the Education of Children*; *Account of the Progress of J. Lancaster's Plan for the Education of Children* (1810); *Report on the Progress of his Plan from the Year 1793* (1812).

LANCASTER, in Pennsylvania. (See *Appendix* to this volume.)

LANCE; a weapon consisting of a long shaft, with a sharp point, much used, particularly before the invention of fire-arms.

It was common among the Greeks and Romans. The Macedonian phalanx was armed with it, and it was the chief weapon of the Roman infantry. The javelin, or *pilum*, was but secondary. The lance is found among almost all uncivilized tribes: it was the chief weapon in the middle ages, and is now considered one of the most effective arms of cavalry. The lance of the knight, in the middle ages, was of a peculiar form. Near the lower end, it was very thick, with a deep opening, in which the arm was placed when the lance was put in rest, preparatory to a charge. Immediately in front of the opening, the lance was from 1 to 1½ feet in diameter, and sloped off towards the upper end, which was from ½ to ¾ of an inch in diameter. From this weapon the small bands, of which the cavalry of the middle ages consisted, took their name. A *lance* denoted a man at arms (horseman completely armed) with four or five attendants. Among the French, in the fifteenth century, these attendants consisted of three archers, one *coutillier* (so named from the long, broad dirk in his belt), and one page or valet. The introduction of firearms gradually led to the disuse of the lance in the West of Europe, though it continued among the Turks, Albanians, Tartars, Cossacks, Poles and Russians, and other Slavonic tribes, among whom it was borne by light-armed cavalry, on fleet horses. Frederic the Great, seeing the advantageous use made of this weapon by the Poles, gave it to a portion of his cavalry, and afterwards formed an entire regiment of lancers. The Austrians followed, and soon established three regiments of *Uhlans*, as they were termed. After the partition of Poland, many Poles entered the French service, and a body of Polish lancers was established. The war with Russia, in which the efficiency of the lance in the hands of the Cossacks, particularly in 1812, was strikingly manifested, brought this weapon into still more repute, and the Prussians formed three regiments of *Uhlans*. The French lancers were formed in 1813, to cope with the Cossacks. Almost all the armies of Europe now have regiments of lancers. To use the lance with effect, however, requires much practice. The lances now in use, among the European cavalry, have a shaft of ash or beech wood, 8, 12, or even 16 feet long, with a steel point, 8 or 10 inches long, and, to prevent this being hewn off, the shaft is guarded by two strips of iron, 1½ to 2 feet long, below which an iron ball is sometimes placed to

prevent the lance point from penetrating too far. The other end has an iron cap, to prevent its splitting. The point has a small flag, intended, by its waving, to frighten the horses of the enemy. When not in use, the lance is carried in a leather shoe, by the right stirrup, dependent by a leathern thong on the right arm. In use, it is carried under the right arm. This weapon requires a practised horseman. (See *Pike*.)

LANCELOT OF THE LAKE; the name of one of the paladins celebrated in the traditions and fables relating to king Arthur (q. v.), or the Round Table. According to tradition, Lancelot was the son of Ban, king of Brucic, and, after his father's death, was educated by the fairy Viviana (the Lady of the Lake). The youth having given proofs of great valor, she took him to Cramalat, to the court of king Arthur, and requested him to make him one of his knights, and to admit him to the number of the heroes of the Round Table. Arthur, with his sword (*escalibor*), dubbed him knight, and Lancelot subsequently distinguished himself by his extraordinary deeds and great heroism amongst all the paladins of the Round Table. His love for Genevra, the beautiful wife of Arthur, and his disregard of Morgana, a fairy, and the sister of Arthur, placed the knight in the most dangerous and marvellous situations, from which, however, he always extricated himself by his valor and the assistance of the Lady of the Lake. He finally succeeded to the throne of his ancestors, after having defeated king Claudas, the murderer of his father, but was slain by Mordrec, the nephew and murderer of Arthur, whom Lancelot wished to punish. In his last moments, Viviana appeared to him, and, with a gentle kiss, took the last breath from the lips of the dying hero, who was the sole survivor of the knights of the Round Table. His remains were taken to his castle, and there deposited near those of the beautiful Genevra. This tradition has been variously handled by poets.

LANCEROTTA; one of the Canary islands. (See *Canaries*.)

LANFRANC, a prelate of the eleventh century, distinguished by his learning and abilities, as well as by his opposition to Rome, was born in 1005, at Pavia, and, after having been for some time a professor of jurisprudence at Avranches, assumed the cowl, and was elected prior of the abbey of Bec in 1044. In 1059, he entered into a dispute with Berengarius of Tours, at Rome, respecting the doc-

trine of transubstantiation, and maintained the controversy against him, not only personally before the general council held in that city, but subsequently in his writings. Three years after, he exchanged his priory for the abbey of St. Stephen, at Caen, in Normandy; and when William, the sovereign of that duchy, acquired the English throne by conquest, the interest of that prince procured his election, in 1070, to the archbishopric of Canterbury, then become vacant by the deposition of Stigand. In his superintendance of this diocese, he was early involved in a contest with Thomas, archbishop of York, respecting the primacy, which was decided in his favor. Lanfranc was an able politician, as well as a munificent prelate. He died in 1089. His writings were printed in one volume, folio, 1647.

LAND. PROPERTY IN. [The following article, translated from the German *Conversations-Lexicon*, has more particular reference to the state of things existing in Europe. Much of the speculation, however, is of a general nature, and we have thought the whole article might prove not uninteresting to our readers.] The relations of landed property are among the most complicated and most important in civil society. They lie at the foundation of almost all the relations and institutions of the state. On their right direction depend the strength and vigor of the commonwealth. They mark the transitions from one step of refinement to another (hunting and fishing, raising of cattle, agriculture conducted by slaves and bondmen, or by freemen, with or without a right in the soil). These relations express the ancient hostility between various classes of people, between hunters, herdsmen and husbandmen, between city and village, &c. Nevertheless, hardly any subject of law and politics has been investigated with so little profoundness. In no one has prejudice gained such an ascendancy, and resulted in such important consequences. Almost all modern constitutions have taken landed property for the basis of their most important institutions, and given the owners of land a power over the other members of society, the consequences of which are apparent. Distinguished writers have even gone so far as to call owners of land the only true citizens—the nation, properly so called; and all others who chance to have no immediate share in the soil of the state where they reside, are styled by them mere strangers—tenants at will—a homeless rabble, dependent on the good pleas-

ure of their landlords—a class of people, who, in affairs of common interest, are scarcely permitted to hear, and never to speak; whose duty is obedience to their natural masters, the proprietors of the land. But, if these relations are carefully examined, this view is found to be connected with palpable errors. 1. It is wrong to suppose that the banding together of men in a state is connected inseparably with the appropriation of landed property, and that this constitutes the distinction between wandering hordes and civil society. Even nomadic nations have some general idea of the exclusive right of their descendants to the lands which they have been in the habit of periodically occupying, and where they have found support for themselves and their cattle. They esteem it an attack upon their essential rights, for another family or tribe to usurp these pastures, just as hunters consider it a violation of their privileges, when their hunting grounds are contracted by the encroachment of settlers, or by the incursions of strangers in pursuit of game. Hence Abraham separated from Lot. (*Genesis*, xiii.) The various treaties of the European settlers with the savages of the American wilds clearly show how deeply the idea of the rights of tribes and families in the soil is rooted in nature, and how fully it is developed long before the rude inhabitants have united under a regular government. 2. The division of territory among private owners takes place much later, is not inseparably connected with the purposes of a state, and is incapable, at any time, of absolute perfection. We must remember, on the one hand, that a division of this nature takes place before the idea of the true purposes of a state is matured; and, on the other, experience shows, that even a very regularly constituted state may exist in connexion with the original community of property in the soil. But the assertion of the right of private property in the soil, before the assemblage of men, for common purposes, has given rise to states, is so rare, that perhaps history offers no precedent of it, except in the case of some Robinson Crusoe, who has claimed the ownership of some unappropriated territory on which chance had thrown him, and, what is more to the purpose, a proper ownership in the soil can arise only in and for the purposes of a state; and this right is always different from that which obtains in regard to movable property. The confusion of these two relations, in law so essentially different, arises from the cir-

cumstance that the same name is applied to both, and is the source of those numerous errors, the evil consequences of which are felt in every vein of the body politic.

3. Kant has particularly shown that genuine property (and a possession not dependent on actual occupation, with all the consequences that result from it) arises first in and by the state. Before him, men were led away, by the customary ideas of positive law, to regard the occupation of property as an act by which an object of nature becomes, once for all, united with the person of the possessor; in such a manner that every other person must abstain from the use of it, even though the owner should leave it unemployed (if it be a piece of land wholly uncultivated), or be without the ability suitably to use it (as if it includes a large district). But there is no reason, aside from the positive law of the land, why one man should be authorized to bind forever the will of others; and it is impossible in regard to the soil, because, in this way, it would be made forever dependent upon the will of the first possessor, and others might be excluded from the very means of existence. Hence private property in land is among the institutions which are first established by the state; but it must be observed, that these still remain subject to alteration whenever the good of the state seems to require it. Apart from the state, a man has no unalienable property but his own person, and a claim upon others for a regard to his personal dignity, which arises from the worth of his nature, and makes it unlawful for others to use him merely as the instrument of their own purposes, or to avail themselves of his powers, or the fruits of them, against his will. Labor is therefore the foundation of property, apart from the institutions of the state; and its visible sign, that is, the alteration of form produced by it, gives notice to others that they are to abstain from the use of the article thus appropriated. By labor, a man connects a part of himself with a given subject; but this relation is not eternal; it continues only while the form impressed on it by such owner remains; for the labor bestowed by men on natural materials is only an alteration of the relations of form and place; it leads to no new product. Man can create nothing new. This privilege nature has reserved to herself by eternal and unchangeable laws; but man can only alter the forms and relations of natural productions, and bring them into connexions in which the creative power of nature

shall become serviceable to his ends. He impresses upon things the stamp of his own ingenuity, and exercises that dominion of mind over matter, the extension of which is an important part of his destiny. There is therefore a kind of property independent of that given by the institutions of the state, but not unalienable. As a man possesses nothing in nature, but the labor which he incorporates with it, that is, the form which he gives it, this right ceases when the effects of the labor are lost, and the form vanishes. Nature has a tendency to efface the impressions of art; the human form loses its symmetry, the tamed beast returns to his native wildness, and the cultivated field to its former sterility. The effects of labor are lost; and, if a second now appropriates the object, when it is relinquished by the first, he deprives no one of the fruits of his labor, and there is no question of property. 4. This view of the subject shows that the state is not to be looked upon as a combination of landed proprietors; for they have become landed proprietors only by means of the state itself; and it is just as absurd to derive the existence of the state from something that received existence from it, as to consider nobility older than sovereignty, and independent of it. It is likewise unfounded in a historical point of view. In the history of all states, we return, with the fullest certainty, to the period when the soil was common to all the inhabitants, and to the subsequent period, when it was regarded as the rightful possession of a certain family or community. The family occupation is obviously the oldest form of restricted possession, which unfolded itself first in the patriarchal government, and is to be seen in the original constitution of almost every state. The origin of family property can be traced only to the immediate gift of a higher power. Thus Jehovah promised to the family of Abraham the land lying on the banks of the Jordan; and the North American tribes ascribe the right of the red men to their hunting grounds to a special gift of the Great Spirit. Hence we see the reason why, in all the early divisions of territory, some important portion of the land, or a permanent tax, as the tenth of all the fruits, was preserved for the service of the national deities. From common property there arose, under the patriarchal dominion, the exclusive right of the founder of the family; for, while the oldest member is the representative of the whole, it belongs to him to divide the

common soil among the different members. If the population increases, and circumstances prevent the sending out of colonies, or the wandering of a part of the family, nothing remains but to procure from the ground a richer supply of provisions by regular cultivation; and, when the wandering tribes, who before subsisted by hunting, submit to the more arduous labors of agriculture, a division of the territory into portions, which are secured to individuals by conditions more or less settled, cannot be avoided. But the forms under which this important change takes place are almost infinite. Sometimes the land is divided among individuals every year; sometimes it is assigned to the principal members of the stock, the elders of the tribe, and by them subdivided among the inferior members. This is seldom done, however, without a compensation. The compensation, for the most part, consists of a certain part of the productions of the soil, or of a sum of money, fixed without regard to the harvest. The idea of common property gradually died away, especially when private property grew up in particular cases, or in neighboring tribes, along with the annual division; and the head of the tribe, instead of remaining the manager of the common property, became its exclusive possessor. This has been the state of things in most of the countries in the south of Asia; and we find traces of it till a very late period, even in Europe, in which a patriarchal government, but slightly modified by the general constitution of the country, has obtained, till modern times in the Scottish Highlands. Every tribe there viewed itself as a family, and the eldest member, or laird, as the master. The territory of the clan was his; what was not retained for his own use, or the public, he divided in large portions among his nearer relations (tacksmen), who either cultivated it themselves, or distributed it in smaller portions among the people. But the grant to the tacksmen was only transient; when the family increased in numbers, they were forced to give place to the nearer relations of the laird. (See *Highlands*.) The condition of common property in the soil is very different, when the family union gives place to a regular community; and this is a general consequence, wherever a part of the race seek new habitations on account of their increasing numbers, and where, to overcome the opposition of the primitive settlers, collections of emigrants from several families enter into a political union.

In the constitution of communities, the property of the whole belongs to the associates collectively (and commonly a portion to the divinities of the country and the head of the society); and on account of the military constitution of most early communities, which are constantly in a state of defence or of aggression, they are obliged to take measures that there shall always be a competent number of able-bodied warriors, and also that no one shall be suffered to accumulate too much by purchase or inheritance. Hence a number of lots are laid out, each sufficient to support a family of freemen, and laws are enacted to restrain the further division, as well as the amalgamation of the divisions previously made. This was the case particularly in Sparta, but the plan failed. In Rome, before the laws of the 12 tables, there was a similar institution, and the consequence was, that the lot of a Roman, or his family property, could not be taken from him, or sold by him to another. As Rome retained many relics of the patriarchal government, and these had an important influence upon all their civil institutions, it was impossible for the relations of landed property to be free from it. The community in general had a large landed property, which was daily increased by successful wars (the conquered being usually deprived of a part of their territory); but the ruling patrician families were the only real gainers by the addition. The soil was divided among them; and, in fact, it would have been of little use to that class of citizens who subsisted on the income of their original lot, because men were wanting for the purposes of agriculture. This want of laborers is shown by the fact, that the patricians forced a vast number of their plebeian debtors to labor for them; and these debtors were numerous; for the constant wars that harassed the Roman government reduced multitudes to the necessity of borrowing. Hence it was much for the advantage of this class of people that, in the 12 tables, in the famous passage which gave occasion for dispute even in the time of the Antonines, and which has been understood as referring to the division of the debtor's body, provision was made, in all probability, for the divisibility and alienability of the landed property of the citizens. At the same time, it is manifest, that the desire of the plebeians to establish a new and more just division of land (by the agrarian laws), was founded on the principles of right. But after this important step was once taken, a more and

more perfect freedom and divisibility of landed property found place in the Roman law, which forms a characteristic trait of their legislation. In the German states, the dissolution of the ancient family unions by the institution of societies, was the fundamental principle which manifested itself first in the relation of leaders and their personal retainers. In the new states established by successive conquests, extremely complicated relations grew up; as the ancient inhabitants were sometimes deprived of all their landed property, as in England, for example, and sometimes surrendered only a part of it, as in Italy and the south of France; and this division also took place with many diversities of form. In regard to the share in the land which belonged to the conqueror, we find again a general division: a certain portion of the whole fell to the chief, who had to apply it to the support of his immediate attendants; another portion was assigned to the attendants themselves, and, after certain subdivisions and tithings, it was given up to the community as common property. This common property was enjoyed, not unrestrictedly, but on condition of appearing to do military service. In a few instances, it long retained its character of common property. It was sometimes divided among the people by the head of the community for cultivation; and here and there was bestowed on individuals, on condition of military service. This peculiarity is the foundation of the indivisibility of land, which occurs in some constitutions, and the exclusion of females from the right of inheritance (in the *terra salica* of the Franks). To this community of property, or allodial possessions (in Saxon, *folkland*, or *reeveland*), are opposed the infeoffments of princes, which were often the means employed by them to collect from the mass of the people, whether conquerors or conquered, a new retinue of more faithful personal attendants (Latin, *fideles*; Spanish, *hidalgos*), to whom they gave these lands in pay, instead of money. Hence arose the *thaneland*, and the more extensive grants by written contract, the *bookland* of the Saxons, the *feh-od* (land paid for services, instead of money, from the Gothic *faiba*, cattle, wealth, money, reward; hence the English *fee*), or feudal possessions. The intermixtures, substitutions, and modifications, which these relations subsequently underwent, it is not necessary for us to dwell upon. We need only show how, in the modern states of Europe, private property in the soil may be traced to common property, and the

clear evidence which it bears of such an origin, in order to prove that it depends upon a grant on the part of the community, and that hence the owners of landed property have no right in the soil, but what is permitted by the state. What they receive from the state is not an acknowledgment and confirmation of a right, which they before possessed independently of such acknowledgment, but the right itself. It is no arbitrary right, but it stands in close connexion with certain duties, and its existence and continuance are subject to the state legislation. The owners of landed property do not constitute the people, but only a single class, bound, like the rest, to devote their all to the promotion of the public good.

5. History goes hand in hand with philosophy thus far: while the former contradicts the supposition that landed property is perfectly unrestricted, to be used at will, the latter rejects the idea of such a grant as illegal, and even void. These philosophical grounds, indeed, must not destroy any actually existing rights; but reason has no small voice in deciding what is actually contained in the existing rights. To sound reason it is evident, that every person must be allowed some resting-place on the earth; hence, as long as any place is left capable of affording support to another individual, the proprietors cannot arbitrarily deprive a fellow being of that support. They are bound to use the soil in such a way as to promote the general good. For every right has some duty for its basis; and landed property is possessed of peculiar rights, only because it is pledged to furnish men with food. This duty becomes more important and pressing as the population increases; hence it is necessary for the state to attend the more carefully to the fulfilment of it; and the more sacred becomes the duty of those in whose hands the means are lodged. According to these premises, the states of Europe have regulated their conduct; they have not suffered ground capable of yielding income to lie unimproved; they have judiciously limited the cultivation of such plants as contribute nothing to the nourishment of the human species, as tobacco, for example; they have encouraged the cultivation of other plants; they have forbidden the exportation of articles which are needed in the state where they are raised; and, in some instances, their zeal has led them into wrong principles in their commercial intercourse; above all, they have taken away all obstructions to the improved cultivation of

the land. And these ordinances are imperiously demanded by the state of society; for the right of property in the soil has no other end than to promote the cultivation of it for the general good; and it is on such conditions only that the state has distributed the land among individuals. If it is found necessary to deprive a proprietor of landed property of any advantage accruing to him from such a possession, it is not maintained that he shall receive no compensation; but if a compensation is granted, the laws cannot be charged with interfering with his rights, if they impose restrictions upon him in the use of his ground. Hence the common good allows the state to repeal all laws which are a restraint upon the free use of the soil, as tithes; to promote its distribution by breaking up entails, &c., and to secure the cultivator, by not permitting him to be driven from the soil at the will of the landlord, or even by making temporary relations permanent; as the landed proprietors in Ireland, for example, were forced to substitute, in part, quit-rents in the room of leases for years. These ordinances concern the whole community; so that persons who are destitute of landed property have as good a right to be heard on this subject as the landed proprietors. Hence, 6, it is matter of serious reflection, that the constitutions of many modern states provide that the representative body shall be composed entirely of landed proprietors. This is partly on the ground of usage, partly from principles intrinsically good, that men receive the greatest advantage, not from a hasty renunciation of ancient laws, although imperfect, but from slow and cautious advancement, and that it is far more necessary to preserve the existing institutions, and to build them up with judgment and care, than to think of rearing new edifices; for though the foundations of these may seem perfect, their advantages are not certain. But whether this end can be attained by an exclusive representation of landed proprietors, may well be made a question. How can the true wants of all classes be made manifest, if the representation is confined to one? For this reason, a variety in the condition and rank of representatives is highly desirable; and, in some representative governments, provision has been made to attain such an object. Necessary as it is to provide that the representatives shall consist of men interested in preserving, and not in destroying, the settled order of things, it is equally necessary to avoid, as much as possible, the preponderance of

men interested in maintaining old abuses, and to provide, as fully as possible, for representing the views of the great body of the people. It is not the soil, nor its possessors, but the great interests of the whole community, which form the object of the state and of representative constitutions.

LAND, in the sea language, makes part of several compound terms: thus *laying the land* denotes that motion of a ship which increases its distance from the coast, so as to make it appear lower or smaller on account of the intermediate convexity of the sea.—*Raising the land* is produced by the motion of the vessel towards it.—*Land is shut in*, signifies that another part of land hinders the sight of that the ship came from.—*Land to*; or so far from shore that it can only be just discerned.—*Land Turn*; a wind that, in almost all hot countries, blows at certain times from the shore in the night.—*To set the land*; that is, to see by the compass how it bears.—*Land-Breeze*; a current of air which, in many parts within the tropics, particularly in the West Indies, regularly sets from the land towards the sea during the night, and this even on opposite points of the coast.—*Land-locked* is said of a harbor which is environed by land on all sides, so as to exclude the prospect of the sea, unless over some intervening land.—*To make the land*, is to discover it after having been out of sight of it for some time.—*Land-Mark*; any mountain, rock, steeple, or the like, near the sea-side, which serves to direct ships passing by how to steer, so as to avoid certain dangers, rocks, shoals, whirlpools, &c.

LANDS, PUBLIC. (See *Public Lands*.)

LANDAMMANN, in Switzerland (originally *Landamtman*); the highest magistrate in the country, contradistinguished from *Stadtamtman*, the highest magistrate in the city. At present, the highest magistrate in the cantons of Uri, Schweiz, Underwalden, Glarus, Zug, Appenzell, St. Gall, Thurgau, Tessin, and Pays-de-Vaud, is called *Landammann*. Most cantons have two or more, who command alternately; some only one. The first magistrates of the other cantons are called *Schultheiss* (mayor), *Burgermeister*, *Landhauptmann*, *Syndicus*, &c. The president of the diet of all Switzerland is also called *Landammann*.

LANDAU; a district of 530 square miles, with 101,600 inhabitants, and a fortified town of the Germanic confederacy, with 5700 inhabitants; lon. 8° 10' E.; lat. 49° 13' N. It is under the sovereignty of Ba-

varia; was formerly a free imperial city, belonging to Lower Alsace. Vauban constructed the fortifications.

LANDECK; a town in Silesia, near which are some mineral springs. The waters contain sulphate of potash, lime and nitrogen. The temperature is 86° Fah.

LANDER, Richard; the servant of captain Clapperton, whom he accompanied on his second expedition into the interior of Africa. He started from the Bight of Benin with his master, after whose death at Soccatoo (April 13, 1827), he returned to the coast. His Journal is published with Clapperton's. (See *Clapperton*.) In the spring of 1830, he set out, with his brother John, on an exploring expedition, and was landed at Badagry, March 25, whence he intended to proceed to lake Tchad. (See the articles *Tchad*, and *Niger*.) At the time of writing this (June, 1831), the newspapers have stated, that the two brothers arrived at Rio Janeiro from Fernando Po, in April last (1831), having in their possession the papers of Mungo Park. It is also further stated, that they had descended the Niger to a point where it had become 10 miles wide, and separated into several branches, the principal of which, according to the Landers, formed the river Nonn, which empties into the Bight of Benin. Here, however, the travellers, being captured by the Negroes, were unable to prosecute this route any further. If this statement is confirmed, we shall be able to give the results of their discoveries under the articles *Niger*, and *Park*.

LANDES; a department in the southwest of France. (See *Department*.)

LANDINUS, Christopher, an Italian scholar, philosopher and poet, born at Florence in 1424, was patronised by Pietro de' Medici, and appointed tutor to his son, the afterwards celebrated Lorenzo, with whom an attachment highly honorable to both parties took place. Landinus, in his old age, became secretary to the seignior of Florence, and died in 1504. He left several Latin poems, and his notes on Virgil, Horace and Dante are much esteemed. His philosophical opinions appear in his *Disputationes Camaldulenses* (1480, folio, and Strasburg, 1508).

LANDO, Michel; a wool-comber at Florence, who became, during the revolution of that republic, in 1378, *gonfaloniere* of the republic. Machiavelli, in the third book of his History of Florence, describes him as one of the wisest and greatest men, though from the lowest class. By his prudence and firmness, he

put an end to disorder, deposed the existing magistrates, created a new nobility, and divided the people into three classes. This state of things, however, only lasted until 1381. (See Machiavelli's *History of Florence*.)

LANDRECIES, or LANDRECY; a fortress on the Sambre (navigable from this place), in the department Du Nord; lon. 3° 42' E.; lat. 50° 22' N.; with 3800 inhabitants. Its situation renders Landrency important in any war between Germany and France. Francis I captured it, but it was recovered by Charles V. In 1655, it was taken by Louis XIV, and was ceded to France by the peace of the Pyrenees, in 1659. In 1712, prince Eugene besieged it; but marshal Villars delivered it. In 1794, Landrency was taken by the Austrians, after a valiant defence, but recovered the same year. In 1815, the Prussians captured it after a short bombardment.

LANDSCAPE PAINTING. (See *Painting*.)

LAND'S END, in Cornwall; the western extremity of England. Lon. 5° 45' W.; lat. 50° 6' N.

LANDSHUT; a city in the Bavarian circle of the Iser, with 8000 inhabitants, on the river Iser; lon. 12° 6' E.; lat. 48° 30' N. The city is well built; the spire of St. Martin's church is 456 feet high. Landshut formerly contained the university called *Ludovico-Maximiliana*, which was transferred hither from Ingoldstadt; but, in 1826, it was transferred to Munich. (q. v.)

LANDSHUT, in Silesia, government of Liegnitz, at the foot of the Riesengebirge, on the Bober (3100 inhabitants), is important for its linen trade.

LANDSMANNSCHAFT. (See *University*.)

LANDSTURM. (See *Levée-en-Masse*.)

LANDWEHR. (See *Militia*.)

LANGDON, John, an eminent American patriot, was born at Portsmouth, N. H., in the year 1739, and was educated in his native place. At an early age, he entered the counting house of a merchant, and afterwards owned and commanded a ship which was employed in the London and West India trade, but soon exchanged the sea-faring life for the business exclusively of a merchant, in which he was highly successful. At the opening of the revolution, he took a decided part in behalf of the colonies. As early as 1774, when the mother country passed the Boston port bill, and menaced hostilities, Mr. Langdon, with John Sullivan and Thomas Pickering, raised a troop, proceeded to the fort at Great Island, disarmed the garrison, and conveyed the arms and ammunition to a place of safety. The royal govern-

ment would have prosecuted him, but was deterred by the resolution of the inhabitants to shield him at all hazards. In 1775, he was a delegate to the general congress of the colonies. In June, 1776, he resigned his seat in that body, for the place of navy-agent. In 1777, he was speaker of the assembly of New Hampshire, and, when means were wanted to support a regiment, Langdon gave all his hard money, pledged his plate, and applied to the same purpose the proceeds of 70 hogsheads of tobacco. A brigade was raised with the means which he furnished, and with that brigade general Stark achieved his memorable victory over the Hessians. In 1785, Mr. Langdon was president of New Hampshire, and, in 1787, delegate in the convention that framed the federal constitution. Under this constitution, he was one of the first senators from New Hampshire. In 1805, he was elected governor of his state, and again in 1810. In 1801, president Jefferson solicited him in vain to accept the post of secretary of the navy at Washington. He died Sept. 18, 1819. Governor Langdon was a conspicuous and efficient public character. In the party politics of the Union, he acted with Mr. Jefferson and his associates; but he was honored and trusted on all sides. The influence of his name was great throughout the Union.

LANGELAND; an island of Denmark, in the south part of the Great Belt, between the islands of Laaland and Funen, about 30 miles in length, and from 3 to 5 in breadth; lon. $10^{\circ} 50'$ E.; lat. 55° N.; population, about 11,200; square miles, 103. This island is fertile in every part. It is now only a county, but one of the best in the kingdom, and under the same governor as Funen. Rudkioping is the chief town.

LANGERON, count de, was born, 1764, in France, served under Rochambeau in America, and went, in 1787, to Russia, where he distinguished himself against the Turks, and received the golden sword of honor. In 1792, he organized a corps of French emigrants. In the battle of Austerlitz, he commanded, as Russian lieutenant-general, the fourth division. In 1807, he again served against France, then against Turkey. He commanded, under Blücher, in the battle of the Katzbach (q. v.), and took the division Puthod. In 1815, he again commanded a corps of 35,000 men against Napoleon, but did not arrive in time for the battle. On his return to Russia, he was made governor-general of the Crimea, and, in 1829, as

general of the infantry, commanded a corps against the Turks.

LANGLANDE, Robert; a secular priest, and fellow of Oriel college, Oxford, in the fourteenth century, who is supposed to have been the author of the curious poetical compositions, entitled, the Vision of Pierce Plowman, and Pierce Plowman's Crede. He is said to have been a disciple of Wickliffe; and his poems are satires on the vice and luxury of the monastic orders and Romish clergy in general. Editions of these works have been published by doctor T. D. Whitaker. (See Warton's *Hist. of Eng. Poetry.*)

LANGLÈS, Lewis Matthew, a celebrated Oriental scholar, born at Peronne, in France, in 1763, studied Arabic and Persian under M. Silvestre de Sacy, afterwards Mantchou, and published an alphabet of that language in 1787, with a dedication to the academy of inscriptions. This work was followed, in 1788, by a *Dictionnaire Mantchou-Français*, after which he printed various pieces translated from the Arabic and Persian. In 1790, he published Indian Fables and Tales, newly translated, with a preliminary discourse, and notes on the religion, manners and literature of the Hindoos; and also the second volume of his Mantchou Dictionary. He was, in 1792, nominated keeper of the Oriental MSS. in the royal library; and, in 1793, he belonged to a temporary commission of arts, attached to the committee of public instruction. After the revolution in July, 1794, he became keeper of the literary *dépôt*, established in the old convent of the Capuchins, *rue St. Honoré*. To his zeal and influence were owing the creation and organization of a particular school for the Oriental living languages, in which he was professor of Persian. He wrote notes for a new edition of the Travels of Pallas, translated by Lapeyronie, which he published in 1795 (8 vols., 8vo., with an atlas). He was also the author of valuable additions to the travels of Thunberg, Norden, &c. After the executive directory had suppressed the temporary commission of arts, and dispersed, in various establishments, the objects which had been collected at the Capuchin convent, M. Langlès devoted himself entirely to the duties of his professorship, and to those which devolved on him as conservator of the Oriental MSS. in the national library. On the formation of the institute, he became a member, and belonged to the commission of literature, to which he presented many memoirs and notices of manuscripts. He also assisted

in many periodical works. In 1796, in conjunction with MM. Daunou and Baudin des Ardennes, he made an abortive attempt to reëstablish the *Journal des Savans*; and the *Magazin encyclopédique* contains a great number of notices and dissertations from the pen of M. Langles. He died in January, 1824. He had formed a noble collection of books, manuscripts, engravings, &c.; and his house was the general resort of travellers, *cognoscenti*, and students.

LANGREL, or LANGRAGE; a particular kind of shot, formed of bolts, nails, and other pieces of iron, tied together, and forming a sort of cylinder, which corresponds with the bore of the cannon from which it is discharged, in order to wound or carry away the masts, or tear the sails and rigging of the adversary. It is seldom used but by privateers or merchantmen.

LANGTON, Stephen; a cardinal, and archbishop of Canterbury, in the reign of John, whose disputes with the papal see originated in his rejection of this prelate's appointment. By birth, Langton was an Englishman, but he received his education in the French metropolis. In the university of that city, he had risen gradually, through various subordinate offices, to the chancellorship, when, on going to Rome, the learning and abilities which had hitherto facilitated his advancement raised him so high in the favor of Innocent III, that the pontiff, in 1207, not only elevated him to the purple, but presented him to the vacant primacy of England, respecting the disposal of which the king was then at variance with the monks of Canterbury. John refused to confirm the nomination, seized on the temporalities of the see, and ordered the monks to depart the kingdom. A sentence of excommunication upon himself and his whole realm was the consequence; nor was it removed till the weak monarch, alarmed by the warlike preparations of France, and the general disaffection of his subjects, gave up every point in dispute, and reconciled himself to the church. Langton took possession of his diocese in 1213, and was a strenuous defender of the privileges of the English church. The first division of the chapters of the Bible into verses is attributed to him. De la Rue mentions him among the Anglo-Norman poets of the thirteenth century.

LANGUAGE. This word, originally derived from the Latin *lingua* (tongue), in its most general sense, means the faculty which God has given to men of communicating their perceptions and ideas to one another, by means of articulate sounds. Metaphorically, its signification is extend-

ed to every other mode by which ideas may be made to pass from mind to mind. Thus we say, the "language of the eyes," the "language of signs," the "language of birds and beasts." Even silence, by a bold metaphor, has been assimilated to language by one of the most elegant British poets:

"Come then, expressive silence, muse his praise."

THOMSON.

In an analogous sense, philologists call the communication of ideas by writing, *written* language, in contradistinction to language properly so called, which they denominate *spoken* language. It is certain that ideas may be communicated by signs, representative of sounds, which word *representative* must not, however, be taken literally, because there is no point of contact between the sense of seeing and that of hearing; all that can be said is, that, by tacit convention, certain visible signs are made to awaken in the mind the idea of certain audible sounds, which sounds, by another tacit agreement, awaken the ideas of physical objects or of moral perceptions. Thus the eye operates on the mind through the medium of the ear; but the process is so rapid, that it is not perceived at the time, and writing may be said even to be a quicker mode of communication than speech, for the eye can run over, and the mind comprehend, the sense of a page of a printed book, in a much shorter space of time than the words which it contains can be articulated. Still the passage of ideas from the eye to the mind is not immediate; the spoken words are interposed between, but the immortal mind of man, that knows neither time nor space, does not perceive them in its rapid flight; and by this we may form a faint idea of what the operations of the soul will be, when freed from the shackles of our perishable frames. (For a more particular development of this subject, as applied to alphabetical writing, see an essay, entitled *English Phonology*, in the first volume of the new series of the Transactions of the American Philosophical Society, p. 228.) The same principle applies equally to those modes of writing which philologists have denominated *ideographic*, by which it would seem to be implied, that ideas are immediately transmitted through the eye to the mind. Among those is classed the Chinese. But it is well known that every one of the numerous characters of which that writing consists, awakens in the mind the idea of a syllable, which it is meant to represent; and that syllable, in speech, rep-

resents a spoken word or part of a word. Thus, in this instance, the ear (the mental ear) is also an intermediate agent between the eye and the mind. (See the article *Chinese Language, Writing and Literature*; see also a letter from Peter S. Duponceau, esq., of Philadelphia, to captain Basil Hall, in the London Philosophical Magazine for January, 1829, where this question is discussed at large.) The same may be said of the Egyptian hieroglyphics. (q. v.) For a long time, it was believed that every one of those signs was the representative of an idea, until the researches of the younger Champollion afforded the most complete proof of their having been chiefly used as alphabetical characters, although their forms indicate a different destination. It would seem that it was originally intended to employ them to represent ideas, not abstractedly, but through words or sentences of the spoken idiom; for wherever a language exists, and all nations have spoken before they wrote, ideas can only occur to the mind in the shapes given to them by the peculiar structure and grammatical forms of that language. That might easily have been done to a certain extent. There was no difficulty in devising signs to awaken in the mind the idea of the sun, the moon, a tree, a house, or other object, perceptible by the sense of sight: physical and even moral qualities might be expressed metaphorically, as they are in speech; and even some abstract ideas might be represented as they are with us by our algebraic characters. But this mode of communication was necessarily very limited, and its sense, as well as its method, could only be explained by means of spoken words. This led to an easier process, and the hieroglyphics were turned into alphabetical letters. A number of them continued to be employed in the former mode; as, in our almanacs, we have characters representing the sun, the moon and her phases, various stars, and the signs of the zodiac. These are hieroglyphics, to all intents and purposes, and every written language (if we may use the term) has more or less of them. The Egyptians have employed them in greater abundance than any other nation. Still those signs awakened ideas in no other forms than those in which they presented themselves to the mind, when clothed in words; hence we are informed by Champollion, that there were hieroglyphs significative of the articles which, in the Coptic language, are prefixed to substantives. But the article is a part of

speech not at all necessary in language, since there are idioms (the Latin, for instance, and, amongst modern languages, the Russian) that are entirely without it; so that it is evident that even hieroglyphic signs were invented to represent words in the first instance, and ideas through them. Of what is called the *Mexican picture-writing*, we know too little to speak very positively. Unfortunately, the key to those hieroglyphs, which was preserved for a long time after the conquest of Mexico, is now lost. Therefore we cannot say how they were connected with the spoken language. But that such a connexion must have existed, it is impossible to doubt; otherwise, the Mexicans could not, as it is known they did, have communicated, by mere pictures of visible objects, the history of their empire, from generation to generation. The few hieroglyphic signs which our northern Indians cut or paint on the bark of trees, to inform each other of the number of their enemies, of the course they are pursuing, and of the number of scalps they have taken in battle, are so limited in their objects, that they only serve to show the difficulty of establishing a similar mode of communication on a more extensive scale. It would soon produce confusion, unless a method were connected with it, based on the structure and on the grammatical forms of the spoken language. This alone could class the signs in the memory, and furnish a clew to their different significations, as applied to various objects, cases and circumstances. It must be otherwise, however, when men, in consequence of some natural defect, as the deaf and dumb, for instance, have no idea of sounds, and therefore are without a spoken language. Here their ideas are formed from the recollection of the perceptions which they have received through other senses than that of hearing. They, however, invent signs to communicate with each other, either through the organs of sight or by means of touch. It has been observed, that many of those signs seem to have been taught by nature, and are the same in countries far distant from each other. These are to sight and feeling what onomatopoeias are to sound, and are much more numerous, because more abounding in analogies. Others of those signs are arbitrary, and that is where analogies either entirely fail, or are more obscure and less perceptible. All of them, however, are very limited, and, if the deaf and dumb were left to themselves, would not enable them to enlarge the circle of their

ideas. But the admirable art by which they have been taught to understand our languages, through the application of the sense of sight, and to comprehend the mysteries of their structure and their forms, has opened to them a world of ideas, to which they were before entirely strangers, and has enabled them to combine them with method, compare them with precision, and draw from them correct inferences. To them words are not sounds, but groups of little figures, which class themselves in their minds, and become a medium by which not only to increase the number of the visible signs by touch or gestures, through which they before communicated together, but to improve and methodize them to a degree which, without the knowledge of language, they never would have attained. This language of signs in our deaf and dumb asylums, and no doubt also in Europe, has received a degree of perfection, which, in some respects, particularly in the rapidity with which ideas are communicated, places it above speech, although, in others, its inferiority cannot be denied. Those advantages it has derived from the knowledge of the forms and method of spoken language, obtained through its written image. It follows, from what has been said, that speech alone is properly entitled to the name of language, because it alone can class and methodize ideas, and clothe them in forms which help to discriminate their various shades, and which memory easily retains; that written signs or characters, invented by men who can speak, will naturally awaken ideas, in the forms in which their language has clothed them, so as to convey them to the mind through those well known forms, and consequently through the words or sounds to which they have been given. Those who are deprived, by nature, of the sense of hearing, will make the best use they can of the senses which they possess. We have even known a young woman, born deaf and blind, who, to a certain degree, could understand, and make herself understood, by means of touch; but, otherwise, speech is the basis of all other modes of communication between men, and all of them, whatever be their forms, reach the mind only through the recollection of ideas, as clothed in the words of a spoken language.

Origin and Formation of Language.—The origin of language is involved in deep obscurity. The greatest philosophers, among whom may be mentioned Leibnitz, J. J. Rousseau, Adam Smith,

Dugald Stewart, and many others, have in vain exerted their powers to discover what it is most probable will ever remain to us a profound mystery, at least on this side of the grave. Theories have been accumulated upon theories, systems have been formed, and volumes have been written for and against them; but it does not appear that we are much better informed, at present, than we were in the beginning. Human knowledge has its bounds, prescribed by the almighty Creator of the universe; these bounds we may approach to a certain degree, but never pass. However we may be assured of this undeniable truth, it is not the less certain that the same Being who has set limits to our knowledge has implanted in our souls an ardent desire to extend it as far as possible; and, as those precise limits have not been revealed to us, and there remains a vast space of debatable ground, we are not prohibited from exerting our best faculties in order to extend our view of that ground as far as our imperfect judgment, aided by our imperfect senses, will permit; and therefore inquiries of this kind will always be curious and interesting, how often soever they may have been tried in vain. Nor is it less curious to take a retrospective view of the aberrations of the human mind to which these inquiries have given rise. It is unfortunately too true, that, in pursuing them, men have much oftener reasoned *a priori*, than they have sought to come at the truth by means of fair induction from well ascertained facts. It is but lately that philologists have employed themselves in collecting facts till then unobserved, by means of which some extension of our knowledge may be gained, though we must not expect that we shall ever be able to penetrate into the secrets of Providence, which, if they were displayed before us, it is probable that our weak minds could not ever comprehend. Philologists long bewildered themselves in search of the primitive language. The greatest number of the learned assigned that rank to the Hebrew, it being the language of the holy writings, as they have come down to us from the time of Esdras. But many solid objections have been made to that hypothesis, and it seems now to be generally abandoned. Others saw the primitive language in that of their own country, or in some other idiom of which they were particularly fond. Thus Van Gorp, a Fleming, better known as *Becan* or *Becanus*, was in favor of the Low Dutch, Webb was for the Chinese, Reading for the Abyssinian, Siem-

hielm and Rudbeckius for the Swedish, Salmasius, Boxhorn and Aurelius for the Scythian, Erici for the Greek, Hugo for the Latin, the Maronites for the Syriac. In our day, don Juan Bautista de Erro y Azpiroz, who not long since was one of the ministers of state to the present king of Spain, in a work entitled *El Mundo primitivo, ó Examen Filosófico de la Antigüedad y Cultura de la Nación Vascongada* (printed at Madrid, in 1815), claims that honor for the Basque, which, however, in a former work, entitled *Alfabeto de la Lengua primitiva de España* (Madrid, 1806), he had only, and with more reason, supposed to be the primitive language of Spain. A partial translation of these works was published at Boston, in 1829, by our learned countryman, George W. Erving, esquire, late minister of the U. States to the court of Spain, and will be read with interest, because, in the midst of his national prejudices, the Spanish author discovers a truly philosophic mind, particularly where he maintains, with great cogency of argument, that, because men in the beginning had but few wants, it does not follow that they had few ideas, and that their language was destitute of form or method. (*El Mundo primitivo*, p. 37.) The admirable syntax of the languages of the American Indians has sufficiently proved the correctness of this proposition, which now seems to be generally admitted, though it was at first received with great distrust by the learned world. (See *Historical Transactions of the American Philosophical Society*, vol. i, in the report of the secretary of the historical committee, printed at the beginning of the book, in which this doctrine appears to have been sufficiently proved. See, also, the preface to the translation of Zeisberger's Delaware Grammar, in the third volume, new series, of the Philosophical Transactions of the same society.) We shall presently expatiate somewhat more at large upon this subject. That there was a primitive language, which was spoken by the first parents of mankind, is a fact attested by our Holy Scriptures, and which philosophy is not willing to deny. But what has become of that language, and where is it now to be found? Grotius was of opinion, that though it exists at present nowhere in its original form, yet that traces of it may be found in all the languages now spoken. This was a bold assertion, and which could not proceed from actual observation of facts; for what man ever did, what man ever could, compare all the languages of the earth, so as to

ascertain whether or not there are to be found in them traces of a primitive idiom, and, what is still more difficult, to point out what these traces are? One man, however, was found,—a man of extensive learning and erudition, and, at the same time, a pure and an elegant writer, who thought he had discovered the primitive language. This was the celebrated Court de Gébélin, well known as the author of a large work, published at Paris (from 1773 to 1784), containing nine quarto volumes, entitled *Le Monde primitif, analysé et comparé avec le Monde moderne*. This curious work contains etymological dictionaries of the Latin and French languages, in which the author assumes to derive all the words of those idioms from his pretended primitive tongue. He considered speech as an instinct, and every language as a dialect of that which he called "primitive, inspired by God himself—natural, necessary, universal and imperishable." So far may a man be carried, by the spirit of system, and enthusiasm for a favorite hypothesis! It needs not to be said that Gébélin's imperishable language has perished with him; yet his books may still be read with advantage, because, like Don Quixote, when he is not mounted on his hobby horse, he shows himself a man of judgment and of profound thought. Count Lanjuinais has abridged and enriched with notes one of his volumes, entitled *Histoire naturelle de la Parole*—a valuable system of general grammar, held in high esteem by philologists. What gave the greatest appearance of probability to the proposition advanced by Grotius, and many others after him—that the remains of the primitive tongue are to be found and discerned in all existing languages—is the astonishing affinities which have been discovered between the languages of Europe and those of Western Asia, so that even the German and the Sanscrit have been classed together under the generic name *Germano-Indian*. These affinities really do exist, to a degree that would hardly be believed, if the well-ascertained fact were not too stubborn to be resisted. But as soon as we have crossed the Ganges, and proceed towards China, these analogies vanish, and we find languages entirely different from those of the West, not only in etymology, but in their grammatical forms. In the interior of Africa, in the Australian islands, and on the whole of the American continent, we find idioms of different structures, having characters of their own, and in which it would be in vain to seek for traces of the primitive tongue. The late professor Barton, of

Philadelphia, and after him professor Vater, of Königsberg, endeavored to find affinities between the American languages and those of the Tartars and Samoïeds; but their researches produced no decisive results. Here and there they found a few words, which seemed to sound alike, but in such small numbers, and so scattered among the numerous idioms of those nations, that it was not possible to infer even the probability of a former connexion between them; and it is more natural to suppose that chance produced those accidental similarities. (See *New Views of the Origin of the Tribes and Nations of America*, by B. S. Barton, Philadelphia, 1797, 1798; and *Untersuchungen über Amerika's Bevölkerung*, von J. S. Vater, Leipsic, 1810.) If we were only to attend to the etymological part of languages, that is to say, to the words of which they are composed, considered merely in relation to the sounds which they produce when uttered, we might still doubt whether the primitive idiom might not yet exist in all of them, corrupted and disguised by time and a variety of accidents which may easily be imagined; but we have at last turned our thoughts to the internal structure of the various modes of speech; and the immense differences which exist, and appear to have existed from time immemorial, between them, lead us irresistibly to inferences which, at first view, would seem to contradict the Mosaic account of the creation, but which, we think, may still be reconciled with it on scriptural grounds. Were it otherwise, we would not be deterred from our philosophical investigations, convinced as we are that religion and philosophy are sisters, and, though at first they may appear to be opposed, they will, in the end, be reconciled to each other.—When we consider the great variety which exists in the structure or organization—if we may so express ourselves—of the different languages of the earth, and the length of time that has elapsed since that variety has begun to exist, we are at a loss to comprehend how they can all have been derived from one primitive source. We see, in the first place, the Chinese and its kindred dialects completely monosyllabic; that is to say, that every syllable of which they are composed, with very few exceptions, has an appropriate meaning, and conveys, by itself, to the mind, either a simple or a compound idea. At the opposite end of the grammatical scale, we find the languages of the Indians of the American continent polysyllabic in the extreme, composed of words some of them of an enormous length,

while their component syllables have, when separately taken, no meaning whatsoever. The Sanscrit, in Asiatic India, and in the vicinity of China, is also an eminently polysyllabic language, though the roots of its words may be more easily traced than those of the idioms of America. The Sanscrit abounds in grammatical forms, by means of which accessory ideas are conveyed to the mind by regular inflections, evidently the result of a preconceived system. The Chinese has none of those forms: every syllable, every word, conveys a detached idea; and it wants those connecting vocabularies which, in other languages, bind the discourse together, and help the hearer to understand the sense of a period. The same differences exist, in a greater or less degree, in all the languages of the earth, ancient as well as modern. No two of them, it is believed, have exactly the same manner of conveying ideas from mind to mind in the form of words; and, though they may have the same grammatical character in a general point of view, they differ in the details. That is not, however, what we are considering. We mean to speak only of those great and essential differences, in consequence of which, languages may be divided into strongly distinguished classes; such as the *monosyllabic* and the *polysyllabic*, the *atactic*, that is to say, those that are devoid of connecting words and of grammatical forms, and the *syntactic*, which possess these in greater or lesser abundance. These differences, it will be said, may have gradually taken place in the course of time, and prove nothing against the common origin from *one* primitive language. Unfortunately for this objection, they may be traced back so far, and have continued so long, that it is impossible to suppose that they may have been thus successively produced. Taking, for instance, only two of the languages of the old world—the Chinese and the Sanscrit,—or, if it be alleged that the latter is no longer spoken, we will take those languages of India which are known to be mediately or immediately derived from it, and which may fairly be considered as its continuation,—Now, the Chinese and the languages of India are known to have existed at least 4000 years, the one monosyllabic and atactic, the other, or the others, polysyllabic and syntactic. It does not appear that, in all that period of time, they have at all approached nearer to each other, and, in their general structure and character, they remain now as they were as far back as we can trace them. The same might be said of the Hebrew and the class of languages called *Semitic*, of the

Basque, the Greek, the Teutonic, the Slavonic, the Coptic, the Berber of mount Atlas, and the barbarous languages, as they are called, of Asia, Africa, Polynesia and America, all of which are more or less ancient, and some of which may be traced as far back as the Chinese and Sanscrit; and their origin is lost in the night of time. Their organic differences have remained the same, not only for ages, but thousands of ages. From these facts an inference forces itself irresistibly upon the mind, which is, that in all languages there is a strong tendency to preserve their original structure. From the most remote time that the memory of man can reach, we have never seen a monosyllabic language become polysyllabic, or *vice versa*. Why have not the Chinese, and the Sanscrit or its cognate languages, in the course of 4000 years, approximated in the least to each other? Has the Tartar conquest made the least alteration in the structure of the former idiom? How has the Basque preserved its grammatical forms, different as they are from those of any other language, and surrounded as that handful of ancient Iberians is, and has been for so many ages, by idioms of a character entirely opposite? How comes it that the polysynthetic forms of the American languages extend from one end of this vast continent to the other, and that one general grammatical system pervades them all, and appears to have been, from the beginning of time, peculiar to the races of American red men? The strong tendency of languages to preserve their organic structure can alone account; in a satisfactory manner, for these phenomena. If such a tendency be admitted,—and we do not see how it can be reasonably denied,—it must have existed in the primitive language, as well as in those that are supposed to have been derived from it. But when we see that these have preserved their grammatical characters unchanged for more than 4000 years, we cannot believe that, in the 2000 years preceding, according to the generally received chronology, which makes the world about 6000 years old, language should have suffered so many changes in its organic structure as to form new languages, so essentially and so entirely different from each other in that respect, to say nothing of the difference which exists in the etymology of words; for between the Chinese and the Cherokee, for instance, it will be difficult to find the least etymological affinity; and, if the distance of places is assigned as the cause, we will instance the Bengalee—a

language spoken in a country not far from China, and which differs from the Chinese full as much as the Mohawk and the Potawatamee. We are therefore forced into the conclusion, that all the languages which exist on the face of the earth are not derived from one, but that they must be divided into classes or genera, to which must be assigned separate and distinct origins. It is not our business to reconcile this theory with the Mosaic records; we think, however, it may be easily done by supposing (to the contrary of which there is nothing in Scripture) that, at the confusion of tongues, the primitive language, its words and its forms, were entirely effaced from the memory of man, and men were left to their own resources to form new ones, which they did without reference to any preëxisting model. We can in this manner very easily account for all the differences, grammatical as well as etymological, that exist between languages. As to the former, we need only look to the various capacities of the human mind. As the physical eye perceives objects differently, and ascribes to them different shapes and colors, according to the strength of the organ and the point of view from which it contemplates them, so the eye of the mind receives ideas or mental perceptions, according to its various capacities, and to different attending circumstances. What we call ideas, are rapid perceptions, continually flitting before the mental eye. Like objects viewed through the kaleidoscope, they pass before us in ever-changing shapes, and, in endeavoring to fix them on the memory by articulate sounds, the appearance of the moment will decide the form to be given to those representative signs. The man of quick perceptions will try to retain the idea of a whole physical or moral object, or, perhaps, a whole group of objects, in his memory, by means of one single word: another, of slower comprehension, seeing or perceiving a part only, will appropriate a word or a syllable to the expression of that part, and another and another to each of the other parts that he will successively perceive. In this manner, syntactic and atactic idioms have been respectively formed; the impulse first given has been followed, and thus languages have received various organic or grammatical characters and forms. Let us give an example: At the first formation of a language, one man, by signs or otherwise, asks another to do something; the other, anxious to express his consent at once,

and conceiving the whole idea, answers, *Volo*. Another man, whose mind is slower in its operations, divides the idea, and answers in two words, *Ego volo*, or *I will*. Another demand is made, to which the first man does not agree; he answers, *Nolo*; the other says, *Ego non volo*, or *I will not*. Applying this hypothesis to all languages, and their different forms, it will be perceived how, in the beginning, they were framed, and how their various structures have been more or less regular and more or less elegant in their grammatical analogies, according to the tempers and capacities of the nations that first formed them, and of the men that took the lead in that formation, who may not always have been the most sensible of the whole band; for it is to be presumed that, in those early times, as in our day, the affairs of men were not always directed by the ablest, but often, perhaps, by the most forward and the most presuming individual. As to the mechanical or physical part of language, that must have depended on the climate and on the peculiar organizations of individuals. Although the component sounds of all languages appear very few, they are very numerous, if we consider their almost imperceptible shades and modes of utterance. Hence the difficulties that occur everywhere in acquiring the pronunciation of foreign idioms. Although the organs of speech are the same in all men and races of men, great differences are produced in their utterance of sounds, by the early habit of more or less contracting or expanding certain of the muscles of which those organs are composed. Opening or shutting the mouth, letting out the air more or less freely through the lungs, and other similar causes, produce infinite varieties in vocal sounds and consonant articulations, analogous to those that we perceive in musical instruments, which, like the human voice, are operated upon by touch or pressure, or by the impulsion and expulsion of air. The flute does not produce the same sound with the clarinet or French horn, nor the harpsichord with the violin. Even instruments of the same kind produce different effects, according to the manner in which they are played upon. It is so with the human organs. The first sounds that were uttered, when each language was first invented, gave tone and color to the rest, and that depended on the first individuals who uttered those sounds, and whom the others imitated or followed. The habits, once fixed, could not easily afterwards be altered. Each language, therefore, had its

own articulations, its own accent, and its own tones. Philosophers have, in general, been of opinion that the invention of languages was a very difficult task, and that it required a very long time—ages, perhaps—to bring an idiom to perfection. We are inclined to be of the contrary opinion. God has given to man, as he has to other animals, all the faculties that are necessary to attain the ends of his creation. These faculties, in animals, we call *instinct*; and by whatever high-sounding names our pride may induce us to call them in ourselves, they are, after all, no more than a power given by the Almighty Being. He made man a social animal, because that was necessary to the purposes of his creation; for the same purposes, it was necessary that men should understand each other, that they should exchange plans, projects and ideas. God therefore gave them the means of so doing, and these means consisted of physical organs and mental faculties equal to the task. By means of these faculties, they soon found words by which to convey their perceptions of natural and moral objects to one another, and means to retain them in their memory by some method or order of classification, without which they would have been lost in a confusion of articulate sounds. Hence it has happened that there is no language, however barbarous or uncivilized may be the nation that speaks it, that is not systematically arranged; none, in short, that has not a method of its own, or, in other words, a grammar. They are all reducible to certain grammatical principles, and none has yet been found that cannot be so reduced. The American Philosophical Society has proved to a demonstration, that the languages of the aborigines of this continent are rich in words and in grammatical forms, and it has been said, that it would rather seem that they were composed by philosophers in their closets, than by savages in the wilderness. (See *Report to the Historical and Literary Committee, and Correspondence between Mr. Duponceau and Mr. Heckevelde*, in the *Historical Transactions of the Am. Phil. Soc.* vol. i.) When the writer to whom we allude made use of this expression, we believe that he sought to accommodate himself to ideas generally received; for he must have known that languages are not made by philosophers in their closets, and he must have been aware of the failure of all those who attempted to invent what they called a *philosophical language*. Leibnitz, it is said, once had such an idea;

but it is certain that he never tried to carry it into execution; or, if he did, he soon abandoned the senseless project. To such a degree was the presumption of the learned raised, about the middle of the seventeenth century, that it was thought, that an universal language could be made for the use of all mankind. One Becher, having heard a German prince say, that he would give 300 crowns to him who should discover such a language, wrote a treatise, in which he asserted, and tried to prove, that he had made the discovery. He presented it to the prince, who paid him with compliments, and an invitation to dinner. The work is entitled *Character pro Notitia Linguarum universalium* (Frankfort, 1661), and is now very scarce. In 1668, John Wilkins, dean of Rippon, and afterwards bishop of Chester, published a thick folio volume, entitled an *Essay towards a real Character and Philosophical Language*, which contained an alphabet, a grammar and a dictionary of his supposed perfect idiom. Afterwards, a M. Faignet, who is called, in the French Encyclopædia, *trésorier de France*, but who, in fact, was only a receiver of public moneys in some provincial town, wrote, for that compilation, a scheme of a philosophical language, with which the editors did not disdain to swell their work, and which remains there as a monument of the folly and presumption of mankind. The productions of this writer and of bishop Wilkins, show the superiority of nature over philosophy. Nature invents, philosophy imitates. These philosophers had no idea of grammatical forms except those of the languages that they knew, that is to say, those that they had learned at college, and those they had received from their nurses. Therefore, neither the monosyllabic system of the Chinese, nor the polysynthetic of the Americans, ever occurred to their minds; all the improvement that they could think of on the forms which they were familiar with, was, to apply to them the principle of little minds, *uniformity*. To show how they went to work, we will give a few short samples of their respective inventions. M. Faignet thus formed, in his philosophical language, the substantive verb to be :

Infinitive.

Etre = sas
Avoir été = sis
Devoir être = sus
Estant = sont.

Indicative Present.

Je suis = jo sa
Tu es = to sa
Il est = lo sa
Nous sommes = no sa
Vous êtes = vo sa
Ils sont = zo sa.

It is needless to proceed farther: every one will see that the structure of the French language is servilely imitated, with a little of the Latin; and the only improvement, or rather alteration, is a tiresome uniformity in the termination of words. Bishop Wilkins's system is more metaphysical, and of course more complicated. He affects an antithetical arrangement of his words, according to the ideas which they express; thus he says, if *Du* signifies *God*, then *ida* must signify its opposite, or an *idol*; if *dab* be *spirit*, *odab* will be *body*; if *dad* be *heaven*, *odad* will signify *hell*. With respect to dissyllables, if *pida* be *presence*, *pidas* will be *absence*; if *tadu* be *power*, *tadus* will be *impotence*, &c. His numerals are as follows:

Pobal, 10;	pobol, 20;	pobel, 30.
Pobar, 100;	pobor, 200;	pober, 300.
Pobam, 1000;	pobom, 2000;	pobem, 3000.
Poban, 100,000;	pobon, 200,000;	poben, 300,000.

One thousand	six hundred	sixty	six.
Pobam	pobur	pobul	pobu.

His arrangement of words in regular rows of prefixed syllables and terminations, is very different from the order which nature follows in all her works, in the structure of languages as in every thing else. She aims not at a childish uniformity. Hers is not the garden where "grove nods at grove; each alley has a brother." She delights, on the contrary, in "pleasing intricacies," and every where introduces an "artful wildness," to "perplex" while it embellishes the scene. But not so presumptuous man. Under the mask of a false philosophy, he sets himself up as a rival to nature, which he neither knows nor understands. True philosophy, in a more humble spirit, observes and studies her noble works, contented to admire, and not presuming to imitate. All those who have attempted to invent a new language, have taken for their models those that they were most familiar with. Father Lami, however, the author of an esteemed French work upon rhetoric, speaking of the possibility of composing a factitious idiom, proposes, as a type, the language of the Mongul Tartars, probably to make a show of some little knowledge he had of that tongue. But none of these writers thought of framing a language on abstract principles, founded on the most natural arrangement and concatenation of ideas: even the transitive verbs of the Hebrew and other Oriental languages, including in one word the idea of the objective as well as of the governing pronoun, does not ap-

pear to have occurred to their minds. It would have been in vain, however, that they should have sought for a system of grammatical forms more natural than another, since, as we have before observed, all the existing grammatical systems, differing as they do from each other, are equally the work of nature, operating through the minds of men, possessing various physical and moral qualities, and producing different results, though all equally tending to the same end—the intercourse of human minds with each other, through the medium of the organs of speech. We will not, therefore, stop to inquire whether any of the existing languages are more perfect than the others. Perfection is relative to its object. Whatever is adequate to the end for which it was made, cannot be improved but with respect to some new objects to which the times or circumstances require that it should be adapted. And that improvement in language is the work of nature, not of philosophy, literature or science. Necessity sometimes, and sometimes caprice, introduces new words into a language, and chance directs the choice. The same process takes place in the improvement of languages, or rather in the additions made to them, as in their formation. Words are borrowed from neighboring idioms, or framed by analogy from those in common use, by the first man who thinks he has occasion for them, and they are adopted, or not, by the multitude, as chance or fashion directs. Words are often introduced without necessity, and without much regard to euphony, or the genius of the idiom. Thus, in our American English, we say *prairie*, for *meadow land*; formerly we said *savannah*; both words derived from foreign languages—one from the French, the other from the Spanish—and both unnecessary. It has lately become fashionable to say *approval* for *approbation*, *withdrawal* instead of *withdrawing*; and many other similar new-coined words are gradually coming into use. These innovations make the language more copious, not more perfect. The synonymes, in process of time, assume shades of difference in their meaning, which are not thought of when the words are first used. But we are constantly asked whether the Greek, that enchants us so much in the works of Homer and Pindar, is not a more perfect language than, for instance, the Iroquois, or the Algonkin. We answer, that it is not. We must not confound *perfection* with *cultivation*. The wild rose that grows in our

forests is not less a perfect flower than that which adorns our gardens. The latter is more pleasing to our fastidious senses; but will even the most skilful gardener dare to say that he has perfected the work of his Creator? Languages are instruments which have come perfect from the heads of the makers. But they are played on better or worse by different artists. Homer played well on the Greek: he would have played equally well on the Iroquois. If we are to judge of the perfection of a language by the method and regularity of its grammatical forms, that of the Lenni Lenape, of which we have an excellent grammar, by Zeisberger, published in the third volume of the new series of the American Philosophical Transactions, is far superior to our own English, the most anomalous of all idioms, made up almost entirely of monosyllables, full of sibilants and inarticulate vowel sounds; in short, a language which, *a priori*, would be probably pronounced barbarous and uncouth—but hear that instrument played upon by Milton, Shakspeare, Dryden, Pope! If you think that it is the superior perfection of the language that ravishes your senses, and carries you up to the third heavens, you will be much mistaken. It is only the talent of the immortal artists. It is the art of the gardener, who has cultivated this wild tree, and made it produce delicious fruits. But the perfection of a language does not consist in the regularity or in the anomaly of its forms, in its being compounded of monosyllables or polysyllables, or of such or such consonant or vowel sounds predominating in its utterance. Nature in this, as in all her other works, delights in variety. The imperial lily and the humble violet are alike perfect flowers; the barren pine, the stately oak, and the fragrant orange-tree, are alike perfect plants, various in their organization and in their structure, but all adequate to the end for which they were created. Languages were made for the purpose of communication between men, and all are adequate to that end. We have heard that the Chinese language is so imperfect, that men are obliged, in conversation, in order to explain their meaning, to trace, with their fingers, in the air, the figure of written characters. This is exaggerated. We have seen sensible and intelligent Chinese, who have assured us that they never are at a loss to explain their ideas by spoken words. It happens, sometimes, even in speaking English, that when we use a word which, being differently written, has

different meanings, we spell that word, to show in what sense we understand it. The Chinese probably do the same, by means of their characters, but not to the extent that the love of the marvellous, or incorrect information, has induced some writers to maintain. In the same manner, those who have lived long among our Indians, all concur in assuring us that those nations converse with one another, on all subjects, in their own idioms, with the greatest ease. Our missionaries preach to them, and find no difficulty in making them understand the abstract doctrines of our religion; and what must dispel every doubt upon this point is, that the whole of the Old and New Testaments has been translated, by our venerable Eliot, into the language of the Massachusetts Indians. —Let us cease, therefore, to speak of the comparative perfection of languages with respect to each other. They are various instruments, formed by nature, which genius may cultivate and render more pleasing to our senses, but not more adequate to their end, and the organization of which no talent can change, and no genius can imitate. If it be true, as we firmly believe, that languages were various in their original formation, after the traces of the primitive language had, by the divine will, been entirely obliterated from the minds of men, it becomes needless to inquire whether the first language was monosyllabic or polysyllabic, and whether the first words were formed by *onomatopœia*—from an imitation of natural sounds. No doubt there are, in every language, words which have been formed by that kind of process, even in modern times, as, for instance, the word *bomb*. But it does not follow that this has been a general rule. In most of our Indian languages, the word which signifies *thunder* has no resemblance to the noise made by that explosion: for instance, in the Chickasaw, it is *elloha*; Creek, *tenitke*; Huron, *inon*; Cadoes, *deshinin*; Nootka, *tuta*; and there are many other languages in which, in that word, no symptoms of *onomatopœia* appear. It is curious, however, to find that, in the language of the Arkansas, the word for *thunder* is *tonno*, and in that of the Yaos, called by De Laet *Javivi* (a people of Guiana, now extinct), it is *tonimeru*. Chance will produce such similarities, which, when thus isolated, prove nothing for or against the affinity of languages, or their derivation from each other.

LANGUAGES. (See *Philology*.)

LANGUEDOC; before the revolution, a large province of France, divided into Upper and Lower; bounded east by the

Rhône, which separates it from Dauphiny, the county of Venaissin, and Provence; south by Roussillon and the Mediterranean; west by Gascony, and north by Forez, Quercy and Rouergue. Its extent was about 270 miles in length, and 120 in breadth. The land is, in general, very fertile in grain, fruits and wine. Toulouse was the capital of Upper, and Montpellier the capital of Lower Languedoc. It is now divided into the eight following departments:

Department.	Chief Towns.
Gard,	Nîmes.
Hérault,	Montpellier.
Ardèche,	Privas.
Lozère,	Mende.
Tarn,	Alby.
Upper Garonne,	Toulouse.
Aude,	Carcassonne.
Upper Loire,	Le Puy.

(See *Departments*.)

The celebrated canal of Languedoc commences at Cete, and joins the Garonne near Toulouse, forming a communication between the Mediterranean and the Atlantic. It was constructed in the reign of Louis XIV, and is about 140 miles in length. (See *Canals*.)

LANIARD, or LANNIERS; a short piece of rope or line, fastened to several machines in a ship, and serving to secure them in a particular place, or to manage them more conveniently: such are the laniards of the gun-ports, the laniards of the buoy, the laniard of the cat-hook, &c. The principal laniards used in a ship are those employed to extend the shrouds and stays of the mast by their communication with the dead-eyes and hearts, so as to form a sort of mechanical power resembling that of a tackle.

LANIGERA; the specific appellation of the chinchilla of South America. The animal which furnishes the beautiful fur known by the name of *chinchilla*, has, until very recently, been almost entirely unknown to naturalists, except through the imperfect account given by the abbé Molina in his natural history of Chile. Living specimens have occasionally been sent to Europe, and a few years since one was received by Mr. Titian Peale at the Philadelphia museum. Unfortunately, however, these specimens all died about the period of their arrival, and no opportunity was allowed of examining them alive. The British zoological society have recently been more fortunate in receiving a living specimen in good health, from which they have published a beautiful representation of the animal, accompanied by an accurate description of its characters. This we copy from the first

number of the *Delineation of the Gardens and Menagerie of the Zoological Society*, along with Molina's account of the habits of the animal. The length of the body in this specimen is about nine inches, and that of the tail nearly five. Its proportions are close-set, and its limbs comparatively short, the posterior being considerably longer than the anterior. The fur is long, close, woolly, somewhat crisped and entangled; grayish or ash-colored above, and paler beneath. The form of the head resembles that of the rabbit. The eyes are full, large and black, and the ears broad, naked, rounded at the tips, and nearly as long as the head. The mustaches are plentiful and very long, the longest being twice the length of the head, some of them black, and others white. Four short toes, with a distinct rudiment of a thumb, terminate the anterior feet: and the posterior are furnished with the same number; three of them long, the middle more produced than the two lateral ones, and the fourth, external to the others, very short, and placed far behind. On all these toes the claws are short, and nearly hidden by tufts of bristly hairs. The tail is about half the length of the body, of equal thickness throughout, and covered with long bushy hairs. It is usually kept turned up towards the back, but not reverted, as in the squirrels. The chinchilla, says Molina, is another species of field-rat, in great estimation for the extreme fineness of its wool, if a rich fur, as delicate as the silken webs of the garden spiders, may be so termed. It is of an ash-gray, and sufficiently long for spinning. The little animal which produces it is six inches long from the nose to the root of the tail, with small, pointed ears, a short muzzle, teeth like the house rat, and a tail of moderate length, clothed with a delicate fur. It lives in burrows under ground, in the open country of the northern provinces of Chile, and is fond of being in company with others of its species. It feeds upon the roots of various bulbous plants, which grow abundantly in those parts, and produces, twice a year, five or six young ones. It is so docile and mild in temper, that, if taken into the hands, it neither bites nor tries to escape. If placed in the bosom, it remains there as quiet as if it were in its own nest. This extraordinary placidity may possibly be due to its pusillanimity. As it is peculiarly cleanly, there can be no fear of its soiling the clothes of those who handle it, or of its communicating any bad smell to them, for it is entirely free from that ill

odor which characterizes the other species of rats. For this reason it might well be kept in houses with no annoyance, and at a trifling expense, which would be abundantly repaid by the profits on its wool. The ancient Peruvians, who were far more industrious than the modern, made of this wool coverlets for beds and valuable stuffs. To the account of its habits given by Molina, we can only add, that it usually sits on its haunches, and is even able to raise itself up and stand upon its hinder feet. It feeds in a sitting posture, grasping its food, and conveying it to its mouth by means of its fore paws. In its temper it is generally mild and tractable, but it will not always suffer itself to be handled without resistance, and sometimes bites the hand which attempts to fondle it, when not in a humor to be played with. Although a native of the Alpine valleys of Chile, and, consequently, subjected, in its own country, to the effects of a low temperature of the atmosphere, against which its thick coat affords an admirable protection, it was thought necessary to keep it, during the winter, in a moderately warm room, and a piece of flannel was even introduced into its sleeping apartment, for its greater comfort; but this indulgence was most pertinaciously rejected, and, as often as the flannel was replaced, so often was it dragged by the little animal into the outer compartment of the cage, where it amused itself with pulling it about, rolling it up, and shaking it with its feet and teeth. In other respects, it has exhibited but little playfulness, and gives few signs of activity, seldom disturbing its usual quietude by any sudden or extraordinary gambols, but occasionally displaying strong symptoms of alarm when startled by any unusual occurrence. It is, in fact, a remarkably tranquil and peaceable animal, unless when its timidity gets the better of its gentleness. A second individual of this interesting species has lately been added to the collection by the kindness of lady Knighton, in whose possession it had remained for 12 months previous. This specimen is larger in size and rougher in its fur than the one above described: its color is also less uniformly gray, deriving a somewhat mottled appearance from the numerous blackish spots which are scattered over the back and sides. It is possible this may be the Peruvian variety, mentioned in the extract from Schmidt-meyer's *Travels*, as furnishing a less delicate and valuable fur than the Chilian animal. It is equally good tempered and

mild in its disposition, and, probably in consequence of having been domiciliated in a private house, instead of having been exhibited in a public collection, is much more tame and playful. In its late abode, it was frequently suffered to run about the room, when it would show off its agility by leaping to the height of the table. Its food consisted principally of dry herbage, such as hay and clover, on which it appears to have thriven greatly. That of the society's original specimen has hitherto been chiefly grain of various kinds, and succulent roots. When the new comer was first introduced, it was placed in the same cage with the other specimen; but the latter appeared by no means disposed to submit to the presence of the intruder. A ferocious kind of scuffling fight immediately ensued between them, and the latter would unquestionably have fallen a victim, had it not been rescued. Since that time, they have inhabited separate cages, placed side by side. Such an isolated fact can, of course, have little weight in opposition to the testimony of Molina that the chinchilla is fond of company. It is, nevertheless, a remarkable circumstance, and deserves to be mentioned in illustration of the habits of these animals.

LANJUINAIS, Jean Denis, count de, peer of France, member of the academy of inscriptions and belles-lettres for 38 years, a stanch defender of liberal institutions, was born March 12, 1753, at Rennes, of respectable parents. In 1771, he became an advocate in Rennes; in 1775, professor of the canon law; in 1779, member of the estates of Brittany; in 1789, member of the third estate in the constituent assembly, and, at a later period, of the convention. He was the first in the states general, who, in the report on the state of things in his province (Brittany), gave a faithful picture of the oppressions committed by the nobility, and declared the following measures to be the general wish of the nation—the abolition of feudal rights; the abolition of the nobility, and the establishment of a representative constitutional government; offering, at the same time, in the name of his constituency—the *senéchaussé* of Rennes—to give up its privileges of exemption from several taxes, &c., though enjoyed from ancient times. He opposed, with courage and energy, the arrogant pretensions of the privileged class and the intrigues of Mirabeau, and, at a later period, resisted, with equal firmness, the violence of the Mountain party. The object of his wishes

was constitutional liberty; and, when the republic was proclaimed, and Louis XVI was denounced, he was as zealous in defence of the rights of his prince as he had been, and continued to be, for the rights of the nation. Attacked by the Maratists, and even threatened in the convention by a crowd of insurgents, he displayed great courage and dignity. He afterwards retired to Rennes, where, proscribed by the Jacobins, he lived 8 months in concealment. He owed his preservation to his faithful wife, and the heroic fidelity of his servant, Julie Poirier, whom Legouvé has celebrated in his poem *Mérite des Femmes*. After the downfall of the terrorists, Lanjuinais again took his seat in the convention. Soon after, he was chosen president, and opposed the usurpations of Bonaparte. March 22, 1800, he was made senator. Though he had opposed the consulate for life, and the elevation of Bonaparte to the throne, the emperor named him commander of the legion of honor, and created him count. In 1814, Lanjuinais voted for the deposition of Napoleon and the establishment of the provisory government, and aided in preparing the constitution proposed by the senate. Louis XVIII made him a peer, June 4, 1814. During the hundred days, he repeatedly refused to take the oath of allegiance to Napoleon, and voted against the *acte additionnel*. Napoleon approved of his election, by the city of Paris, to the house of representatives, and his elevation by that body to the place of their president. After the second restoration, Lanjuinais opposed, in the chamber of peers, all the extravagant and arrogant pretensions of the clergy, defended the liberty of the press and individual freedom, the law of election and the charter. He voted against the war with Spain, against the reduction of the *rentes*, and the septennial elections of the chamber. The speeches and writings of count Lanjuinais are profound and comprehensive. Among the latter are his *Mémoires sur la Religion*, which is directed against the extension of the ecclesiastical jurisdiction; his *Constitutions de la Nation Française* (2 vols., 1819); his work on the three Concordates, and some historical essays, chiefly in the *Revue encyclopédique*. In 1808, he was elected a member of the institute, in the class of inscriptions and belles-lettres; and, in 1816, the king confirmed him in this place. Lanjuinais died January 15, 1827.

LANNES, John, marshal of France, duke of Montebello, born in 1769, was an ap-

prentice to a dyer, and, in 1792, on the invasion of the French soil, entered the army as sergeant-major. His talents and services had raised him to the rank of *chef de brigade* as early as 1795, and general Bonaparte created him colonel after the battle of Millesimo. After distinguishing himself in Italy and Egypt, whence he returned with Bonaparte, and serving under the first consul in Italy, he was made marshal of the empire (1804), and subsequently duke of Montebello. In the campaign against Austria (1805), he rendered important services, and, at the battle of Austerlitz, commanded the left wing of the main army. At Jena, Eylau, Friedland (1807), at Tudela, Saragossa, &c., in Spain, marshal Lannes obtained a brilliant renown. In the campaign of 1809 against Austria, he lost both his legs by a cannon ball in the battle of Esslingen or Asperme, May 22, and died May 31. Napoleon was strongly moved at the sight of the dying Lannes, who was a favorite of the emperor. His eldest son was created a peer by the king, in 1815. He visited the U. States in 1828, and, during the revolution of 1830, fought on the side of the people.

LANSLOWNE, William Petty, marquis of, was born in 1737. He succeeded to the Irish title of earl of Shelburne, on the death of his father, in 1761, and, in 1763, obtained the office of president of the board of trade, which he resigned to join the opposition led by Mr. Pitt (lord Chatham), with whom he returned to office in 1766. When a change of ministry took place, in 1768, he was again displaced, and continued to be a parliamentary antagonist of ministers till 1782, when he was nominated secretary of state for the foreign department. On the death of the premier, the marquis of Rockingham, he was succeeded by lord Shelburne, who was soon obliged to give way to the coalition between lord North and Mr. Fox. In 1784, he became an English peer, by the titles of marquis of Lansdowne and earl of Wycombe. He now employed himself in the cultivation of science and literature, and collected a valuable library, the MSS. belonging to which were, after his death, purchased for the British museum. His death took place in 1805. Lord Lansdowne was twice married. By his second wife, lady Louisa Fitzpatrick, he became the father of the present marquis.

LANSLOWNE, Henry Petty, marquis of, son of the preceding, was born in 1780, and educated at Westminster and at Edin-

burgh, under Dugald Stewart. After completing his studies at Cambridge, he was returned to the house of commons, as member for Calve (1802), and was distinguished for his talents of business and debate. Mr. Fox had formed so favorable an opinion of him, that, on assuming the direction of affairs, in 1806, he made it a point that lord Petty (as he was then called) should be nominated chancellor of the exchequer. This ministry did not survive the death of Mr. Fox (q. v.), and lord Petty retired to domestic life. In 1809, he succeeded to the title and seat of his elder brother, who died without issue. His political career has been distinguished by the support of manly and liberal principles. He exerted himself strenuously to effect the abolition of the slave-trade, and of the Catholic disabilities, and took an active part in the defence of the queen. When the late Mr. Canning, on being directed to form a cabinet, found himself abandoned by the ultra Tory party, he turned to the marquis of Lansdowne and his friends; the marquis received a seat in the cabinet without office, and, on the early death of the distinguished premier, held the seals of the home office, in the Goderich ministry, which, however, by the dissolution of that cabinet, he was soon obliged to resign to Mr. (now Sir) R. Peel. On the formation of the new Whig ministry (November, 1830), the marquis became president of the council. The great measure of reform which this ministry have so promptly brought forward, now agitates the country, and the fate of the cabinet and the plan must be decided by the tone of the house of commons, which shall be returned by the pending election. (See *Parliament*.)

LANTERN (*laterna*, Lat.; *lanterne*, Fr.); a common contrivance to carry a lamp or candle in, being a kind of cover usually made of tin, with sashes of some transparent matter, as glass, horn, &c., to transmit the light. Theopompus, a Greek comic poet, and Empedocles of Agrigentum are the first who have spoken of this kind of illumination. In the *Antiquités d'Herculanum*, vol. viii, will be found represented a collection of ancient lanterns, one of which, of a round form, was discovered in one of the great roads of Herculanum, in 1760, and another, 1764, at Pompeii, in the vestibule of a house, by the side of a human skeleton. The use to which these instruments were put was various. A modern author has stated, without sufficient proof however, that the games of the circus, at Rome, and the

sacred games in Greece, were celebrated by this kind of light. Plutarch expressly says that they were used in augury. It is more certain still that they were common among the military, and were always carried before any troops who had to march by night. These were borne upon the top of a pike, and were constructed of a fashion to throw light only behind them.

—*Dark Lantern*; one with only a single opening, which may also be closed up when the light is to be entirely hidden, or opened when there is occasion for its assistance to discover some object,—

Magic Lantern, or laterna megalographica; an instrument used to magnify paintings on glass, and throw their images upon a white screen, in a darkened chamber. On the fore-part of the lantern, there is a thick double-convex lens, or a plane-convex (usually called a *bull's eye*), of short focus. The lantern is closed on every side, so that no light can come out of it but what passes through the lens. In the direction of this lens, there is a tube fixed to the lantern, which has a lateral aperture from side to side; through this a glass slider, with the painted small images, is moved in an inverted position. The fore part of the tube contains another sliding tube, which carries a double-convex lens. The effect of those parts is as follows: The thick lens, in the side of the lantern, throws a good deal of light from the candle upon the image; and, to increase that light still more, a reflector is very often, but not always, placed in such lanterns; and the flame being in the focus of the reflector, the light proceeds in parallel lines from the reflector to the lens. The image, being thus well illuminated, sends forth rays from every point, which, by passing through the lens belonging to the sliding tube, are conveyed to a focus upon the wall, and form the large images.—The

Phantasmagoria is like the magic lantern, only, instead of the figures being on transparent glass, all the glass is opaque, except the figure only, which being painted in transparent colors, the light shines through it, and no light can fall on the screen but what passes through the figure. The screen is very thin silk, between the spectators and the lantern, and, by moving the instrument backwards or forwards, the figures seem to recede or approach.—*Feast of lanterns*, in China; a celebrated feast held on the 15th day of the first month, and thus denominated from the immense number of lanterns hung out of the houses, and in the streets, the number of which has been reported even to exceed 200,000,000.

Some of these have been valued at 2000 crowns. They are adorned with gilding, painting, japanning, sculpture, &c. The size of many of these lanterns is represented to be quite huge: some reach nearly 30 feet in diameter. They are constructed so as to resemble halls or chambers; and two or three such machines together would make a handsome house; so that the Chinese eat, lodge, receive visits, have balls, and act plays, in a lantern. They light up in them an infinite number of torches or lamps, which, at a distance, have a beautiful effect. In these they exhibit various kinds of shows to divert the people. Besides these enormous machines, there is a multitude of smaller ones, which usually consist of six faces or lights, each about four feet high and one and a half broad, framed in wood, finely gilt and adorned: over these they stretch a fine transparent silk, curiously painted with flowers, trees, and sometimes with human figures: the painting is very extraordinary, and the colors extremely bright; and when the torches are lighted, the appearance is exceedingly striking and lively.—In architecture, *lantern* signifies a little dome raised over the roof of a building, to give light, and serve as a sort of crowning to the fabric. The same term is likewise used for a square cage of carpentry placed over the ridge of a corridor or gallery, between two rows of shops (as in the royal exchange, London), to illumine them.—The *lantern*, on ship-board, is a well-known machine, of which there are many in a ship, particularly for the purpose of directing the course of other ships in a fleet or convoy; such as the poop and top-lantern.

LANTERN FLY (*fulgora*); a genus of insects, belonging to the *hemiptera*, and closely allied to the locusts and grasshoppers, from which it is distinguished by the great prolongation of the head. Few circumstances are more remarkable than the phosphoric light emitted by some insects, as by the glow-worm and fire-fly, but more especially by the species under consideration. This is said to possess this lucid quality in so eminent a degree, as to be used, by the inhabitants of the countries where they are found, for the purposes of illumination. The largest of these insects is the *F. lanternaria*, which is found in great abundance in South America. Madame Merian gives an entertaining account of the alarm into which she was thrown by the light produced from them, before she was apprized of their shining nature. It appears the Indians

brought her a number of the lantern flies, shut up in a box. During the night, they made such a noise, that they awoke her, and induced her to open the box, when, to her astonishment and affright, a strong light proceeded from it, and as many of the insects as left it, so many flames appeared. There are many other species of these flies, one of which—the Chinese—almost equals the South American in splendor. In both of those, the light proceeds from the elongated and hollow part of the head, no other portion of the animal being luminous. A full account of all the species will be found in Fabricius, *Syst. Rhyng.*, and Olivier, *Encycl. Méthod.*, article *Fulgore*.

LANZI, Luigi, the celebrated archæologist, was born at Treia, in the Mark of Ancona, in June, 1731, and became a pupil of the Jesuits, and a member of the order. He made himself master of the whole field of classical studies, and the ruins of Rome awakened his curiosity to the examination of the remains of ancient art, in treating of which, he evinced profound learning and critical acuteness. From Rome, Lanzi went to Florence, and made himself acquainted with all the masterpieces of art collected there. In 1782, he published a *Guida della Galleria di Firenze*, on which he labored during the rest of his life. This work not only satisfied the inquirer by its extensive learning, but amused the mere searcher after pleasure, by its pleasing descriptions. He was chosen president of the *Crusca*, in 1807, on account of the purity of his language. A patriotic feeling had engaged Lanzi in the study of Etruscan antiquity, which was then little cultivated. Learned Tuscans, in the middle of the 18th century, had attempted to elevate Etruscan civilization, by maintaining that the Etruscan religion and mythology were entirely unaffected by Grecian influence. Lanzi's researches led him to form a different opinion. The remains of the Etruscan language and art denoted, in his opinion, a Grecian origin, and, disclaiming all national vanity, he openly maintained the prevailing influence of Greece on Etruscan civilization. German scholars have adopted his opinion. A critical method and profound erudition render his *Saggio di Lingua Etrusca e di altre antiche d'Italia, per servire alla Storia de' Popoli, delle Lingue e delle Belle Arti* (Rome, 1789, 3 vols.), a classical work. Lanzi next undertook a history of the art of painting in Italy, at the suggestion of the grand-duke of Tus-

cany (who died in 1824); and this work is of equal merit with that just mentioned. The charms of his style render this erudite production highly attractive. Of this *Storia pittorica dell' Italia dal Risorgimento delle Belle Arti fin presso al Fine del XVIII Secolo*, the 3d edition (Bassano, 1809, 6 vols.) deserves the preference, as containing his own last additions. The first edition appeared in 1795, the fourth in 1822 (Florence; English, by Thomas Roscoe, London, 1828). His *Inquiries* respecting the Etruscan Vases, so called (Florence, 1806), is a work of great learning, the most valuable treasures of which have been still more generally diffused by Millin. He also published Latin Inscriptions, which are much esteemed, a translation of Hesiod's Works and Days, and some theological productions, the fruit of his last years. Since his death, which took place March 30, 1811, some of them have been collected by the cavalier Onofrio Boni, in the *Opere Postume* (Florence, 1817, 2 vols., 4to.). Inghirami published, in 1824, a new edition, with corrections and additions, of Lanzi's *Notizie della Scultura degli Antichi*, with engravings. As a man, Lanzi was amiable, and readily assisted others in their researches and learned labors. He was buried in the church of Santa Croce, at Florence, where the remains of so many great men repose. Onofrio Boni of Crotona has written an *Elogio dell' Ab. D. Luigi Lanzi*, and the abbate J. B. Zannoni, sub-librarian at Florence, a biography of this distinguished man.

LAOCOON, a priest of Neptune (according to some, of Apollo), at Troy, after the pretended retreat of the Greeks, was sacrificing a bull to Neptune, on the shore, when two enormous serpents appeared swimming from the island of Tenedos, and advanced towards the altar. The people fled; but Laocoon and his sons fell victims to the monsters. The sons were first attacked, and then the father, who attempted to defend them. Wreathing themselves round him, the serpents raised their heads high above him, while, in his agony, he endeavored to extricate himself from their folds. They then hastened to the temple of Pallas, where, placing themselves at the foot of the goddess, they hid themselves under her shield. The people saw, in this omen, Laocoon's punishment for his impiety in having pierced with his spear the wooden horse, which was consecrated to Minerva. Thus Virgil (*Æn.* ii, 199) relates the story. Other authors (for instance, Hyginus) give different ac-

counts, though agreeing in the main points. The story has frequently furnished a subject to the poets. Sophocles introduced it into a tragedy. But it is chiefly interesting to us, as having given occasion to one of the finest works of sculpture—the group of Laocoon, now in the Vatican. This was discovered in 1506, by some persons digging in a vineyard, on the site of the baths of Titus. Pope Julius II bought it for an annual pension, and placed it in the Belvedere, in the Vatican, where it has again been placed since its restoration from Paris. The preservation is perfect, except that the right arm of Laocoon was wanting: this was restored by a skilful pupil of Michael Angelo. This group is so perfect a work, so grand, so instructive for the student of the fine arts, that many authors of all nations, particularly Germans, have written on it; of whom we may mention Göthe, Heyne, Lessing, Hirt, Herder. It is a most difficult subject. It represents three persons in agony, but in different attitudes of struggling or fear, according to their ages, and the mental anguish of the father. All connoisseurs declare the group perfect, the product of the most thorough knowledge of anatomy, of character, and of ideal perfection. According to Pliny, it was the common opinion that this group was made of one stone, by the sculptors Agesander, Polydorus and Athenodorus, all three natives of Rhodes, and the two latter probably sons of the former. Doubts exist respecting the era of this work. Maffei places it in the 88th Olympiad, or the first years of the Peloponnesian war; Winckelmann, in the time of Lysippus and Alexander; Lessing makes it probable that those three artists lived under the first emperors. It may be fairly doubted whether the statue, mentioned by Pliny, is the same which we now have; at least, acute observers have found that the group does not consist of one block, though the junctions are very carefully concealed. To this it may be answered, that they were not, perhaps, perceptible in the time of Pliny. Several copies exist of this matchless production; one in bronze, from a model by Giacopo Tatti or Sanzovino, which was carried to France. Bacio Bandinelli made a copy, which is in the Medici gallery, at Florence. The group is placed on a pedestal, about the height of a man, which seems to be too low, Laocoon being above the natural size. Lessing wrote a work, called *Laokoon*, or the Boundaries of Painting and Poetry, in which he draws illustrations from this

subject, because it has been handled by a poet and by plastic artists.

LAODICE; a daughter of Priam and Hecuba, who became enamored of Acamas, son of Theseus, when he came, with Diomedes, from the Greeks to Troy, on an embassy, to demand the restoration of Helen. She had a son by Acamas, whom she called Munitus. She afterwards married Helicaon, son of Antenor, and Telephus, king of Mysia. Some called her Astyoche. According to the Greek scholiast of Lycophron, Laodice threw herself down from the top of a tower, and was killed, when Troy was sacked by the Greeks.—One of the Oceanides.—A daughter of Cinyras, by whom Elatus had some children.—A daughter of Agamemnon, called also *Electra*.—A sister of Mithridates, who married Ariarathes, king of Cappadocia, and afterwards her own brother, Mithridates. During the absence of Mithridates, she prostituted herself to her servants, believing that her husband was dead; but, when she saw her expectations frustrated, she attempted to poison Mithridates, for which she was put to death.—A queen of Cappadocia, put to death by her subjects for poisoning five of her children.—A sister and wife of Antiochus II. She put to death Berenice, whom her husband had married. She was murdered by order of Ptolemy Euergetes.—A daughter of Demetrius, shamefully put to death by Ammonius, the tyrannical minister of the vicious Alexander Bala, king of Syria.—A daughter of Seleucus.—The mother of Seleucus.

LAODICEA; a city of Asia, on the borders of Caria, Phrygia, and Lydia, celebrated for its commerce and the fine wool of its sheep. It was originally called *Diospolis*, and afterwards *Rhoas*. It received the name of *Laodicea* in honor of Laodice, the wife of Antiochus. There were several other places of the same name.

LAOMEDON; son of Ilus, king of Troy. He married Strymo, called by some *Placia*, or *Leucippe*, by whom he had Podarces, afterwards known by the name of *Priam*, and Hesione. He built the walls of Troy, and was assisted by Apollo and Neptune, whom Jupiter had banished from heaven, and condemned to be subservient to the will of Laomedon for one year. When the walls were finished, Laomedon refused to reward the labors of the gods; and, soon after, his territories were laid waste by the sea, or Neptune, and his subjects were visited by a pestilence sent by Apollo. Sacrifices were offered to the offended divinities,

but the calamities of the Trojans increased, and nothing could appease the gods, according to the words of the oracle, but annually to expose to a sea-monster a Trojan virgin. Whenever the monster appeared, the marriageable maidens were assembled, and one was doomed to death, by lot, for the good of her country. When this calamity had continued for five or six years, the lot fell upon Hesione, Laomedon's daughter. The king was unwilling to part with a daughter whom he loved with uncommon tenderness, but his refusal would irritate more strongly the wrath of the gods. In the midst of this fear and hesitation, Hercules came, and offered to deliver the Trojans from this public calamity, if Laomedon would promise to reward him with a number of fine horses. The king consented; but, when the monster was destroyed, he refused to fulfil his engagements, upon which Hercules besieged Troy, and took it by force of arms. Laomedon was put to death after a reign of 29 years; his daughter Hesione was given in marriage to Telamon, one of the conqueror's attendants, and Podarces was ransomed by the Trojans, and placed upon his father's throne. According to Hyginus, the wrath of Neptune and Apollo was kindled against Laomedon because he refused to offer on their altars, as a sacrifice, all the first born of his cattle, according to a vow he had made.

LAON, BATTLE OF, March 9, 1814. (See *Chatillon*.)

LA PARLE; the chief village of a French colony in the south of Africa. About 140 years ago, a number of French Protestants fled to that distant corner of the world to worship freely, according to the dictates of their consciences. In 1739, the Dutch prohibited preaching in French; Dutch is therefore, at present, the chief language. The colony consists of about 4000 whites of French descent, and 6000 Hottentot slaves. The whites still possess the greatest attachment to France, though for so long a time separated from the civilized world. The colony has lately attracted attention through French missionaries, and may become important in the propagation of Christianity in that region.

LAPEROUSE, John Francis Galaup de; a French navigator, distinguished for his talents, and still more remarkable for the mystery attending his fate. He was born at Albi, in Languedoc, in 1741, and entered, at an early age, into the naval service of his country. During the American

war, he had the command of an expedition sent to Hudson's bay, when he destroyed the trading establishments of the English. After the restoration of peace, the French government having determined on the prosecution of a voyage of discovery, M. de Lapérouse was fixed on to conduct the undertaking. Two vessels—the *Boussole* and the *Astrolabe*—were placed under his command; and, leaving France in 1785, he proceeded to the South sea, and, having visited the coast of California, and other places farther north, he crossed the Pacific, to continue his researches on the eastern coasts and islands of Asia. In April, 1787, the ships sailed from Manilla towards the north; and, after passing the islands of Formosa, Quelpaert, the coasts of Corea and Japan, they sailed between Chinese Tartary and Saghalien, without being able to determine whether it was an island or a peninsula; returning south, discovered the straits which bear the name of *Lapérouse*, and, sailing north on the eastern coast of Saghalien, at length, September 6, arrived at the harbor of St. Peter and St. Paul, on the coast of Kamtschatka. There they staid to refit the ships, and experienced the utmost hospitality from the Russian local authorities. From St. Peter and St. Paul Lapérouse sent copies of his journals, &c., to France, by M. de Lesseps, who proceeded over land across Siberia to Petersburg. From these papers was drawn up the relation of his voyage, published at Paris (1797, four volumes, 4to.), an English translation of which appeared in 1798 (three volumes, 8vo.). September 30, the vessels sailed in search of farther discoveries. They crossed the equinoctial line, without meeting with any land, till December 6, when they saw the Navigator's islands, and, a few days after, they landed at Maoua, one of that group. Here M. de Langle, the captain of the *Astrolabe*, M. Lamanon, the naturalist attached to the expedition, and ten other persons, were killed in what appears to have been an unprovoked attack of the natives. After this misfortune, Lapérouse visited Oyolava, an island near Maoua, and then steered for the English colony in New South Wales. January 23, 1788, they made the coast of New Holland, and, on the 26th, anchored in Botany bay. They left Botany bay in March, and, in a letter which the commodore wrote February 7, he stated his intention to continue his researches till December, when he expected, after visiting the Friendly islands, to arrive at the Isle of France. This was the

latest intelligence received of the fate of the expedition; and M. d'Entrecasteaux, who was despatched by the French government, in 1791, in search of Lapérouse, was unable to trace the course he had taken, or gain any clew to the catastrophe which had befallen him and his companions. In 1825, the attention of the public was excited towards this mysterious affair, by a notice published by the French minister of the marine, purporting that an American captain had declared that he had seen, in the hands of one of the natives of an island in the tract between Louisiade and New Caledonia, a cross of the order of St. Louis, and some medals, which appeared to have been procured from the shipwreck of Lapérouse. In consequence of this information, the commander of a vessel which sailed from Toulon, in April, 1826, on a voyage of discovery, received orders to make researches in the quarter specified, in order to restore to their country any of the shipwrecked crew who might yet remain in existence. Other intelligence, relative to the wreck of two large vessels, on two different islands of the New Hebrides, was obtained by captain Dillon, the commander of an English vessel at Tucopia, in his passage from Valparaiso to Pondicherry, in May, 1826, in consequence of which he was sent back to ascertain the truth of the matter. The facts discovered by him on this mission, were, that the two ships struck on a reef at Mallicolo, 11° 4' S. latitude, 169° 20' E. longitude; one of them immediately went down, and all on board perished; some of the crew of the other escaped, part of whom were murdered by the savages; the remainder built a small vessel, and set sail from Mallicolo; but what became of them is not known. It is not, indeed, certain that these were the vessels of Lapérouse.

LAPIDARY, in the preparation of gems for sculpture; an artificer who cuts precious stones. This art is of great antiquity. There are various machines employed in the cutting of precious stones, according to their quality. The diamond, which is extremely hard, is cut in a wheel of soft steel turned by a mill, with diamond dust, tempered with olive-oil, which also serves to polish it.

LAPIDARY STYLE (from the Latin *lapis*, stone); that which is proper for inscriptions on monuments. Hence the phrase is sometimes used for a laconic, expressive style.

LAPIDOLITE. (See *Mica*.)

LAPIS LAZULI. This superb mineral,

which has been seen regularly crystallized only in a few instances, occurs massive, of a rich azure-blue color; fracture uneven; scratches glass; opaque; easily broken; specific gravity, 2.85. In a strong heat, it intumesces, and melts into a yellowish-black mass. It consists, by one analysis, of 46 silex, 28 lime, 14.5 alumine, 3 oxide of iron, 6.5 sulphate of lime, and 2 water; but a later and more interesting research has given 34 silex, 33 alumine, 3 sulphur, and 22 soda. The finest specimens are brought from China, Persia and Great Bucharina. It is much esteemed for ornamental purposes, especially for inlaid work. The most splendid exhibition of this rare substance is made in the celebrated marble palace built by Catharine, at St. Petersburg, for her favorite Orloff, in which, according to Patrin, there are entire apartments inlaid with lapis lazuli. The ancients were in the habit of engraving upon it, of whose works several specimens are to be seen in the royal library at Paris. But its chief value consists in its affording the very precious pigment called *ultramarine*. (q. v.)

LAPITHÆ; a people of Thessaly. The chief of the Lapithæ assembled to celebrate the nuptials of Pirithoüs, one of their number. The Centaurs were also invited to partake the festivity, which was interrupted by the violence of the Centaurs. The Lapithæ resented the injury. Many of the Centaurs were slain, and they, at last, were obliged to retire. (See *Pirithoüs*, and *Centaurs*.) Hesiod (*Scut.*) and Ovid (*Mét.* xii) have described the battle of the Centaurs and Lapithæ.

LAPLACE, Pierre Simon, marquis de, a celebrated mathematician and astronomer, born 1749, was the son of a farmer in Normandy, went to Paris, where he soon distinguished himself by his knowledge of analysis and the highest branches of geometry, in which, however, Lagrange was superior to him. Laplace was chosen a member of the academy of sciences, one of the 40 of the French academy, and member of the *bureau des longitudes*. In 1796 appeared his famous work *Exposition du Système du Monde* (fifth edition, Paris, 4to.). Laplace did not remain a stranger to politics, and, after the 18th of Brumaire, was made minister of the interior by the first consul. But, from the conversations of Napoleon with Las Cases (*Mémorial*), it is evident that Napoleon was not satisfied with his minister. "A geometriean of the first rank," says the emperor, "he did not reach mediocrity as a statesman. From the first, the consuls

became sensible that they had made a mistake in his appointment. He never viewed any subject in its true light; he was always occupied with subtleties; his notions were all problematic, and he carried the spirit of the *infinitely small* into the administration." After six weeks, therefore, Lucien Bonaparte received his port-folio. Napoleon made Laplace a senator, vice-chancellor and chancellor of the senate, and member of the legion of honor. In a report to the senate in 1805, Laplace proved the necessity of restoring the Gregorian calendar, and abolishing that of the republic. His principal works are his *Traité de Mécanique céleste* (1799—1805, four volumes, 4to.); his *Théorie du Mouvement des Planètes*; *Essai sur les Probabilités*; and *Théorie analytique des Probabilités*. In 1814, Laplace voted for the abdication of Napoleon, and the king created him a peer, with the title of marquis. During the hundred days, he did not appear at the Tuileries. He died March 5, 1827. His *Mécanique céleste* has been translated, with a commentary, by doctor Bowditch of Boston (Hilliard, Gray, & Co., 1830, 4to., first volume.) The amount of matter in the commentary is much greater than that in the text, and the calculations are so happily elucidated, that a student moderately versed in mathematics may follow the great astronomer with pleasure to his beautiful results.*

LAPLAND; the most northern country in Europe, bounded north by the Arctic ocean, east by the White sea, south by Sweden, and west by Norway and the Atlantic. Its extreme breadth is estimated to be 500 miles, and its length, from cape Orlov, on the White sea, to the entrance of Saltersfiord, on the Atlantic, about 700. Lapland is divided into three parts, called *Russian*, *Swedish*, and *Danish* or *Norwegian*. The part of Lapland lying along the northern shore of the gulf of Bothnia, consists of an extensive plain, abounding in immense forests of spruce and Scots fir; but at the distance of 80 miles from that inland sea, the ground becomes gradually elevated, and is at last full of lofty mountains, which rise, between the latitude of 67° and 68° 30', to a height of from 5500 to 6200 feet, which, in this hyperborean region, is 2700 feet above the line of perpetual congelation. The principal rivers are the Torneo, the Kemi, the Lulea, and Pitea. The Yana, the principal river in the north-east, and the Alten, the principal in the north-west,

* This work is, at the same time, one of the finest specimens of American typography.

both run into the Northern ocean. In lakes, Lapland, particularly its mountainous part, abounds. In the maritime districts, there prevails an approach to uniformity of temperature; the winters are not severe, but the summers are raw and foggy; while, in the interior, the winter is intensely cold, but the heat of summer is steady and fructifying. The mean annual temperature at the North Cape (lat. 71° 11' 30") is six degrees higher than at Enontekis, in the interior (in lat. 68° 30'); yet, at the latter, the thermometer rises, in July, to 64°, while, at the Cape, it seldom reaches 50. Lapland abounds in iron; and copper, lead, zinc and arsenic are not uncommon. Barley, or big, is the most common grain. In the low ground, rye is likewise cultivated, and occasionally oats. The berry-bearing plants also are numerous. The most common animals are hares; the others are bears, martens, gluttons, beavers, otters, ermines, squirrels, lemmings (or mountain rats), foxes and wolves. The domestic quadrupeds are oxen, cows, dogs, sheep and goats. The reindeer is the most valuable animal in Lapland. It serves as the principal beast of burden; its milk is highly valued, and its flesh supplies the chief nourishment of the inhabitants. The mountain Laplanders have no fixed habitation, but wander about in quest of food for their flocks of reindeer, and lodge in tents or huts, which are usually about 9 feet in height, and 12 in length. Their diet is chiefly of animal food. During winter, they carry on some traffic with the Swedes. This takes place at Torneo, and other towns on the gulf of Bothnia, and consists in exchanging skins, furs, dried fish, venison, and gloves, for flannel, cloth, hemp, copper, iron, and various utensils, but particularly for spirituous liquors, meal, salt and tobacco. The Laplanders, or, as they call themselves, *Same* (*Laplander*, or *Lappe*, being merely a nickname), are a nation of Finnish extraction. The population is estimated thus: 1900 in Swedish Lapland, nearly 5000 in Norwegian, and 8800 in Russian. Besides these, there are in the country several colonies of Swedes, Norwegians and Finns. The whole population of the country, which is as large as France, cannot exceed 65,000. The height of the Laplanders is between four and five feet; often less. They are of a dark complexion, with black hair; strong, hardy and active. They are naturally gentle and mild; have no characteristic vices nor virtues. Generally speaking,

they have little excitability, but love their country, and are happy in their way. They tan hides, make twine of the sinews of the reindeer, weave coverings for their tents, knit gloves, make wooden utensils, canoes, sledges, and the necessary articles of dress. The dress of both sexes is nearly the same; that of the women is almost solely distinguished by their ornaments. Both sexes wear caps, coats, trousers and boots, either of leather or fur and coarse cloth. In summer, they live in tents; in winter, in huts built of poles covered with birch twigs and earth, having at the top a hole for the smoke. They live on fish and the flesh of reindeer. According to their food, the Laplanders are divided into Reindeer Laplanders or Mountain Laplanders, and Fishing Laplanders. The former wander from pasture to pasture with their reindeer. A wealthy Laplander possesses a thousand or more of these animals, which are used to draw the sledges, and to carry loads. The Fishing Laplanders, however, who possess few or no reindeer, live almost entirely on fish. They kill sables and birds, and catch the eider-duck, as do also the Reindeer Laplanders, if, by disease or other misfortunes, they lose their reindeer. The Laplanders formerly worshipped fetiches. At present, they are all baptized, but they have mixed their old superstitions with Christianity, which has been forced upon them; and it is not uncommon for a Laplander to be baptized whenever he comes to a populous place where there are missionaries.

LAPPO, Arnolph, a celebrated sculptor and architect, born at Florence, 1232, first introduced a better taste into architecture by his great works, and very happily united solidity and grace. He began the building of the cathedral of Florence (to which Brunelleschi afterwards added the admirable dome), the strong walls of Florence, the convent at Assisi, and several churches and other edifices at Florence. He died in 1300.

LAPSE, in ecclesiastical law; a slip or omission of a patron to present a clerk to a benefice within six months of its being void; in which case, the benefice is said to be in *lapse*, or *lapsed*, and the right of presentation devolves to the ordinary.

LAPSED LEGACY is where the legatee dies before the testator, or where a legacy is given upon a future contingency, and the legatee dies before the contingency happens.

LAPSIDED; the state of a ship which is built in such a manner as to have one

side heavier than the other, and, by consequence, to retain a constant heel or inclination towards the heavier side; unless when she is brought upright by placing a greater quantity of the cargo or ballast on the other side.

LAPWING (*tringa vanellus*, Lin.). This bird is about the size of a pigeon, and belongs to the snipe and plover tribe. It is found in Europe in large flocks, except during the pairing season, when it separates for the purposes of incubation. The female lays four eggs, of a dirty olive, spotted with black: she makes no nest, but deposits them upon a little dry grass, rudely scraped together: the young birds run about very soon after they are hatched. During this period, the old ones are very assiduous in their attention to their charge: on the approach of any person to the place of their deposit, they flutter round his head with great inquietude, and, if he persists in advancing, they will endeavor to draw him away, by running off as if lame, and inviting pursuit. These birds have a singular mode of collecting their food, which consists of worms. When they observe the small elevation in the ground which the worm makes before it returns below ground, in the morning, by emptying itself, they gently open it at top with their bill, and tap on the ground, at the side of it. This attracts the worm to the surface, when it becomes the prey of the ingenious hunter. These birds are very lively and active, being almost continually in motion, sporting and frolicking in the air, in all directions, and assuming a variety of attitudes. They run along the ground very nimbly, and spring and bound from spot to spot with great agility. In the month of October, they are very fat, and are then said to be excellent eating. Their eggs are considered a great delicacy, and bring high prices in the London markets.

LAQUERING; the laying on metals colored or transparent varnishes, to produce the appearance of a different color in the metal, or to preserve it from rust. Thus laquered brass appears gilt, and tin is made yellow. Seed-lac is the chief composition for laquers, but turpentine makes a cheaper laquer.

LARBOARD; a name given by seamen to the left side of a ship, when the spectator's face is turned in the direction of the head.

Larboard-Tack is when a ship is close-hauled, with the wind blowing on her larboard side.

LARCENY is the fraudulent taking by a

person of the goods of another, without his consent, with the intent, on the part of the taker, to appropriate them to his own use. As to the taking, the mere removing of the goods is sufficient to constitute the crime; as, where the thief took down goods and put them into a parcel, for the purpose of carrying them away, but was detected and arrested before carrying them away, this was held to be a sufficient taking to constitute larceny. But, where a person only changed the position of a package of cloth, by raising it on end, for the purpose of taking out the cloth from the bale, and was detected in his purpose before he had opened the bale, this was held not to be a sufficient taking to amount to this offence. The doctrine, in this respect, is, that, to make the crime of larceny, the person committing it must get the article into his possession. The intent is a material circumstance; for, if one person takes the goods of another openly, before his eyes, though with the design of appropriating them to his own use, it is not larceny, but only a trespass: so, if goods be taken by negligence or mistake, it is not larceny; as if sheep stray into one's flock, and he shears them by mistake, as his own. The necessity of an intention to steal, in order to constitute larceny, is illustrated by the case of a servant's assisting some thieves to steal his master's goods, with the consent of his master, merely that the thieves, who had previously formed the design of committing the theft, might be detected: it was held not larceny on the part of the servant, but it was held to be so on the part of the others, though it was objected, in their behalf, that the taking was not against the consent of the master, it being essential to larceny, that it should be committed against the owner's consent; but the court held it to come under this description of crime, for the thieves had previously formed the design of stealing the goods, and the master did not consent to their appropriating them to their own use, but only to their proceeding so far that they might be detected and convicted of the crime. If a person has property in goods, and a right to the possession of them, he cannot, in general, commit the crime of larceny in taking them; but, if he only has the custody of them, and no property in them, he may steal them. Thus, if a bailee or lessee of chattels appropriates them to his own use, it is not, in general, larceny. Yet it has been held that, when a common carrier, having charge of a package or box of goods,

opens it, and takes out a part of the goods, with the intent to steal them, this is theft. But the common law makes a very subtle distinction in this respect; for, though breaking the package, and taking a part, with the design of appropriating the articles, is theft, yet selling the whole package entire has been held not to be so, but only the violation of a trust. The cases where a chattel is taken by a person to whom it has been intrusted, and who converts it to his own use, present very nice discriminations of larceny from mere breaches of trust, in regard to which the distinction is made by various circumstances. If the person gets possession of the goods under a false pretence, with the design of stealing them, yet, if they come into his possession on a contract or trust, it has been held, in many cases, not to be a larceny; as, where a horse was bargained for at a fair, and the purchaser rode him off, saying he would return directly and pay the purchase money, but did not come back at all, having intended to swindle the vender, it was held not to be theft. If, however, the purpose for which the article was intrusted to another is accomplished, and he afterwards converts it to his own use, with the intention of stealing it, this is larceny; as, where a horse was let to go to a certain place and back, and the hirer, having gone and returned, then sold the horse, it was held to be theft, for the particular purpose for which the horse had been intrusted to him, had been served. And the courts generally lean towards construing the offence to be a larceny, and not merely a trespass, where the party gains possession by some false pretence, with the original intent to steal; and with good reason, since it is adding a breach of trust to the crime of larceny. If the owner does not part with the possession of the goods, though the person, intending to steal them, contrives to bring them within his reach by some false pretence, this raises no doubt of its being a larceny; as, where one sent to a hosier's for a quantity of stockings, under pretence of wishing to purchase some, and having selected a part out of a parcel brought by a servant, which he pretended he was going to purchase, under some pretence, sent the servant away, and then decamped with the whole parcel, it was held to be larceny, for the owner had never intrusted him with the parcel, or consented to part with the possession. The same construction was put upon the case, when a servant was sent with some goods to a certain person, and another, pretending to be the

person to whom they were sent, received them, with the intent of stealing them. The cases of ring-dropping are instances of it; such getting possession of money or goods by false pretences, being held to be larceny, though the goods come into the possession of the thief by consent of the owner; that is, when a person, in company with another, pretends to find a ring, which was previously dropped for the purpose, and the companion, being imposed upon, proposes to share in the good fortune, to which the finder consents; but, not having money, proposes to his companion to take the ring, giving cash, a watch, or something of half the supposed value of the ring, as a pledge, until he can dispose of the ring, when its value is to be equally divided. The transfer having been made, the swindler goes off with the article that he has received, and his companion finds the ring is of little value. This is held to be larceny. As to the kinds of things, the taking of which is larceny, they must, according to the common law, be personal property, it being a maxim that, though real estate may be trespassed upon, it cannot be stolen; and so fixtures, and whatever is a part of the *realty*, as it is called, could not be subjects of larceny. Thus it was held that a standing tree, fruit upon the tree, ore in a mine, a fence, lead, brass, or other metal, attached to a building, a copper boiler set in bricks, and whatever else would pass by a conveyance of an estate, was not a subject of larceny, and the taking of such things was only a trespass on the real estate. But this distinction is mostly abolished by statutes, for which there was the stronger reason, as many of these things were such as were peculiarly exposed to be stolen. So, again, by the common law, the feloniously taking of written instruments, they not being considered as property, but merely as evidence of contracts, was held not to be larceny; but this doctrine has been partially abrogated by statutes, and the felonious taking of bonds, bills of exchange, &c., is larceny, both in England and the U. States. As to animals, birds, &c., the felonious taking of domesticated ones is felony; but it is not so with those esteemed to be of a wild nature, as bears, foxes, &c., although they may belong to, or have been purchased by some individual, unless they are tamed, or are in the possession and under the control of some one. The felonious taking of a hive of bees is held to be larceny, unless it be a wild hive in the forest, the taking of which is held, in Pennsylvania, not to be larceny.

Nothing can be stolen which is not a subject of property; but the crime of larceny is not confined to the depriving of the owner of the possession of the article. It is sufficient to constitute the offence, to take the article from the possession of one having only a special property, as a carrier or other bailee; and it is a sufficient allegation of the ownership, in the indictment, to state that the article belonged to such person having a special property. In regard to shrouds and coffins of lead, or other materials of value, the question of ownership has heretofore been made, and they are held to belong to the heirs, executors or legatees of the person deceased, and it may be so alleged in the indictment. Larceny was formerly divided, in England, into two kinds, *grand* and *petty*; the former being the stealing of an article over the value of one shilling, the latter, that of an article not over that value. The same division of the kinds of the offence, according to the value of the thing stolen, is made in some of the U. States. But this distinction is abolished in England by a statute of 7 and 8 George IV. In England, the punishment for grand larceny was death; but, most frequently, of late years, it has been commuted for transportation; and, now, the punishment of all simple larceny, of whatever value, is, by the statute above-mentioned, imprisonment or transportation. In the U. States, the punishment is usually imprisonment in the common jail, or penitentiary, for a longer or shorter period, whipping and branding being now mostly, but not universally, abolished. Great discretion is necessarily left with the court, in regard to the punishment of this offence. Some species of larceny, as from the person, are more severely punished than others, by the English law; and a larceny committed in a dwelling-house, by night, is generally considered an aggravated crime, and is punished accordingly. A severer punishment is awarded, both in England and the U. States, on a second or third conviction of the same offender.

LARCH (*larix*); a genus of plants, included, by many able botanists, together with the spruces, under *pinus*; and, indeed, there seems to be no essential difference in the parts of fructification; the leaves, however, are in separate sheaths, and differ from those both of pines and spruces, in being fasciculate and deciduous. The American larch, or hackmatack, is a noble tree, with a straight trunk, often rising to the height of 100 feet, and giving out numerous slender branches.

It is a native of Canada, the northern parts of the U. States, and the higher region of the Alleghany mountains. Its southern limit along the sea-coast may be placed at about latitude 41°; but it is not very abundant even in Vermont, New Hampshire and Maine. In Canada, according to Michaux, it constitutes extensive masses of forest on the upper parts of the Saguenai and about lake Mistassins; and it was observed, by major Long, as far westward as lake Winnipeg. The wood, though heavy, is very highly valued, being remarkably strong and durable, and far superior to that of any pine or spruce. In Maine, it is always used for the knees of vessels, when it can be procured. The European larch, a tree very similar in stature and appearance, but having cones of double the size, is found throughout Siberia, and in most of the northern and mountainous parts of Europe. It is, however, entirely wanting in England and the Pyrenees. The wood is used for a variety of purposes, and is exceedingly durable. An instance is recorded of a vessel built of cypress and larch, which must have remained under water for a thousand years, and the timber of which had become so hard as to resist, entirely, the tools of the workmen. It is much used, in naval architecture, for masts and the frame-work of vessels, being capable of sustaining much greater pressure even than oak; and, in Switzerland, entire houses have been constructed of it, which, however, have the disadvantage of becoming brown, or even black, with age. It affords excellent staves for casks, capable of holding spirituous liquor. The article of commerce called *Venice turpentine* is obtained from this tree; and a single individual will yield seven or eight pounds, annually, for 40 or 50 years. The wood, however, is injured by the process. The celebrated cedar of Lebanon, the largest and most majestic of the *conifera* of the eastern continent, is also a species of larch. Besides mount Lebanon, where the few remaining stocks are preserved with religious veneration, it inhabits Siberia and the Himmalaya mountains. The cones are much larger than those of the preceding species. The wood is said to be soft, and of very little value.

LARCHER, Peter Henry, an eminent French scholar and translator, was born at Dijon, October 12, 1726. He was an intense student of Greek literature, and an assiduous collector of early editions. His first translation was the *Electra* of Euripides, which attracted little attention; but

he became a contributor to several literary journals, and translated from the English the *Martinus Scriblerus*, from Pope's *Miscellanies*, and sir John Pringle's *Observations on the Diseases of the Army*. He also wrote notes to the French version of *Hudibras*. He followed with a translation of the Greek romance of *Chereas and Callirhoe*, which was reprinted in the *Bibliothèque des Romains*. In 1767, a difference took place between him and Voltaire, on whose *Philosophy of History* he published remarks, under the title of a Supplement; to which the latter replied in his well known *Défense de mon Oncle*. Larcher rejoined in a *Réponse à la Défense de mon Oncle*, with which the controversy ceased on his part; but not so the merciless wit of his opponent. He soon after undertook a translation of Herodotus, and, in 1774, published his learned *Mémoire sur Venus*, to which the academy of inscriptions awarded their prize. His translation of Xenophon led to his being elected into that academy. His *Herodotus* was published in 1786, of which a new and very improved edition appeared in 1802. He was subsequently received into the institute, and finally appointed professor of Greek in the imperial university, but was too aged for active services. He died December 22, 1812, and was regretted as an accomplished scholar and amiable man.

LARD; the fat of swine, which differs in its situation from that of almost every other quadruped, as it covers the animal all over, and forms a thick, distinct and continued layer betwixt the flesh and the skin, somewhat like the blubber in whales, applicable to various purposes, both culinary and medicinal, and particularly to the composition of ointments. The usual mode of preparation is, to melt it in a jar placed in a kettle of water, and in this state to boil it, and run it into bladders that have been cleaned with great care. The smaller the bladders are, the better the lard will keep. The fat which adheres to the parts connected with the intestines, differs from common lard, and is preferable for the greasing of carriage wheels.

LARDNER, Nathaniel; a learned divine, born, 1684, at Hawkhurst, in Kent. At the age of 16, he was sent to the university of Utrecht, and afterwards to that of Leyden. He returned to England in 1703, and commenced a preacher about the age of 25. In 1713, he went to reside in the family of lady Treby, as domestic chaplain, and tutor to her son, whom he after-

wards accompanied on a tour through part of France and the Netherlands. In 1723, he was engaged, in conjunction with other ministers, in carrying on a course of lectures at a chapel in the Old Jewry, London. In 1727, he published, in 2 vols., 8vo, the first part of the *Credibility of the Gospel History*: the 12th part appeared in 1755, and was followed by three supplementary volumes, comprising a history of the apostles and evangelists, with observations on the New Testament. The university of Aberdeen, in 1745, conferred on him the degree of D. D. In the latter part of his life, he retired to Hawkhurst, where he died, July 24, 1768, at the age of 84. Besides his principal work, he was the author of *Jewish and Heathen Testimonies to the Truth of the Christian Religion* (1764—67, 4 vols., 4to); the *History of the Heretics of the two first Centuries* (4to., 1780); a *Vindication of three of our Savior's Miracles*, and other theological compositions. A collective edition of his works, with his life, by doctor Kippis, was published in 1788 (11 vols., 8vo.).

LARES (*familiares*) were the domestic and family tutelary gods among the Romans. They were images of wood, stone and metal, and generally stood upon the hearth in a kind of shrine (*lararium*). The higher classes had them also in their bed-chambers or private *lararia* (domestic chapels). On important occasions, a young pig, a lamb, or a calf, was sacrificed to them. From these domestic *lares* must be distinguished those which were publicly worshipped by the whole state, by a city or class of men. *Silvanus* was the general *lar* of the peasants, and *Mars* of the soldiery. The public *lares* were twin sons of *Mercury* and the nymph *Lara*. At Rome, in the beginning of May, a festival was solemnized in honor of them, and of the reigning emperor, who was considered a public *lar*. (See *Pennates*.)

LARISSA, a city of Thessaly, on the *Peneus*, celebrated in ancient times for its bull-fights, which were conducted in the same manner as they are at present in Madrid, was the rendezvous place of *Julius Caesar's* army before the battle of *Pharsalia*. It is now the largest, richest and most populous city in Thessaly, and the seat of a Greek archbishopric, with 4000 houses, and 25,000 inhabitants, of whom about one fourth are Greeks. It has houses for dyeing yarn, manufactories of morocco leather, considerable commerce, and some attention is paid to the

cultivation of the vine. It was the headquarters and centre of the military operations of the Turks against the Greeks, from the time of *Ali Pacha*, who laid the foundation of his power in *Larissa*. From this city also, *Kourschid Pacha*, and all the other seraskiers who succeeded him, commenced their campaigns against *Livadia* and *Epirus*.

LARIVE, *J. Mauduit de*; born in 1749, at *La Rochelle*; one of the most distinguished tragic actors of France, after *Lekain* and *Talma*. Having made his *début* in Lyons, he appeared in Paris, in 1771. He was particularly distinguished in heroic parts. During the reign of terror, he was arrested, and saved only by a secretary of the committee of public safety, who destroyed the proofs against him and the other actors. Before new documents could be collected, *Robespierre* was overthrown. *Geoffroy's critiques*, and *Talma's* rising fame, induced him to leave the stage rather early. He bought a country-seat in the valley of *Montmorency*, and was elected mayor of the place. In 1806, he went, for a short time, to the court of *Joseph Bonaparte*, then king of Naples, to establish a French theatre in his capital. In 1816, he appeared once more in the part of *Tancrede*, though 67 years old, for a charitable purpose, with great success. *Larive* died in 1822. Of his several works, the most important is his *Cours de Déclamation* (3 vols., Paris, 1804—1810).

LARK (*alauda*). In this genus of birds, the bill is straight, slender, bending a little towards the end, and sharp-pointed; the nostrils are covered with feathers, and the tongue bifid. The toes are free, the hinder one thickest, and nearly equal to the outer. There are several species which deserve notice. The sky-lark (*A. arvensis*), which is the most harmonious of this musical family, is almost universally diffused throughout Europe, is every where extremely prolific, and sought for. These birds are easily tamed, and become so familiar as to eat from the hand. The sky-lark commences his song early in the spring, and continues it during the whole summer, and is one of those few birds that chant whilst on the wing. When it first rises from the earth, its notes are feeble and interrupted; as it ascends, however, they gradually swell to their full tone, and, long after the bird has reached a height where it is lost to the eye, it still continues to charm the ear with its melody. It mounts almost perpendicularly, and by successive springs, and descends

in an oblique direction, unless threatened with danger, when it drops like a stone. The female forms her nest on the ground, generally between two clods of earth, and lines it with dry grass. She lays four or five eggs, which are hatched in about a fortnight, and she generally produces two broods in the year. In the autumn, when these birds assemble in flocks, they are taken in vast numbers. Pennant states that as many as 4000 dozen have been caught near Dunstable alone. The wood-lark (*A. arborea*) is distinguished by its small size and less distinct colors. It is generally found near the borders of woods, perches on trees, and sings during the night, so as sometimes to be mistaken for the nightingale. When kept in a cage, near one of the latter birds, it often strives to excel it, and, if not speedily removed, will fall a victim to emulation. The female lays five eggs, of a dusky color, interspersed with deep brown spots, and, like the former species, raises two broods in the year. There is but one true lark, the shore-lark (*A. alpestris*), found in the U. States, and this is also an inhabitant of Europe, though it is much more common, and migrates farther south, in America. It is of a reddish drab color, with a whitish tint beneath; a broad patch on the breast and under each eye, as well as the lateral tail feathers black. The brown lark of Wilson properly belongs to the genus *anthus*. This bird, however, possesses many of the habits of the lark, as that of singing when rising on the wing, seldom perching on trees, building on the ground, &c. The brown lark is also an inhabitant of both continents, but is found only during the winter in the U. States. It is of a pale rufous color beneath, with the breast spotted with black; tail feathers blackish, the outer half white; the second, white at tip. It is usually found in open fields, cultivated grounds, &c., near the water, and feeds exclusively on insects. The meadow-lark, which Wilson classed with the *alauda*, does not belong to this genus, being a *sturnus*, or rather a *sturnella* (Viell), a genus somewhat allied to *alauda*. (See *Meadow-Lark*.)

LARKSPUR (*delphinium*); a genus of plants, allied to the ranunculus and columbine, distinguished by its petaloid calyx, the superior leaflet of which terminates in a long spur. The stem is herbaceous, bearing alternate leaves, which are usually very much divided; and the flowers are disposed in terminal racemes. Some of the species are common in our gardens, where they are cultivated for the beauty

and brilliant colors of their flowers, the prevailing tint of which is blue. Fifty species are known, all belonging to the northern hemisphere, and most of them to the regions around the Mediterranean and Black seas. Five only inhabit North America.

LAROCHE-JACQUELIN. (See *Roche-Jacquelin*, and *La Vendée*.)

LA ROMANA, marquis. (See *Romana*.)

LARREY, Dominique Jean, baron de, commandant of the legion of honor, one of the most distinguished surgeons of France, was born in 1766, at Beaudéau, near Bagnères, department of the Upper-Pyrenees, studied at Paris, under Sabatier. Larrey first introduced, in 1793, the *ambulances volantes* (flying hospitals) into the French army, and accompanied, in 1798, the Egyptian expedition, where he did great service. In all the other campaigns of Napoleon, Larrey gave proofs of his great zeal, courage and sagacity. After the battle of Wagram, he was made a baron. During the passage of the Berezina, he performed a dangerous operation on the general Zajonczech, then 80 years old, afterwards viceroy of Poland. In the battle of Waterloo, Larrey was wounded and taken prisoner. He published his important observations on Egypt and Syria, in 1803, in his *Relation historique et chirurgicale de l'Expédition de l'Armée d'Orient en Egypte et Syrie*. Previous to this had appeared his *Mémoire sur les Amputations des Membres à la Suite des Coups de Feu, étayé des plusieurs Observations* (1797; new edition, 1808); also *Mémoire de Chirurgie militaire et Campagne* (3 vols. 1811, which has been translated into English by Hall). He contributed several articles to the *Dictionnaire des Sciences Médicales*. Napoleon bequeathed to Larrey a legacy of 100,000 francs, and calls him, in his testament, the most virtuous man that he ever knew. Larrey was much beloved by the soldiers, as they showed in times of difficulty.

LARTA. (See *Arta*.)

LARVÆ; a name given to evil spirits and apparitions, which, according to the notions of the Romans, issued from their graves in the night, and came to terrify the world. The word properly signifies a *mask*, whose horrid and uncouth appearance serves to frighten children. (See *Lemures*.)

LASCARIS; the name of two noble Greeks of the fifteenth century, descendants of the imperial family, and both natives of Constantinople, who, on the taking of that capital by the Turks, in 1453,

fled to Italy. *Constantine*, the elder, settled first at Milan, where he was received into the grand-duke's household, as tutor to his daughter. He afterwards visited Rome and Naples, in which latter city he opened a school of eloquence, and, finally, took up his abode at Messina, whither the fame of his literary attainments, especially in the Greek language, attracted many distinguished disciples, and, among others, the celebrated Pietro Bembo, afterwards known as the cardinal of that name. He was the author of a Greek Grammar, and of some other works in that language and in Latin, which were first printed at Milan, in 1476, and again at Venice, in 1495, at the Aldine press. He died about the close of the century.—*John*, the younger of the two, surnamed *Rhyndacenus*, took up his residence at Padua, under the protection of Lorenzo de' Medici, who distinguished him by his favor, and despatched him into Greece, to purchase valuable manuscripts. The sultan's orders gained him access to the libraries, so that he accomplished his mission much to the satisfaction of his employer, and enriched the Florentine collection with the fruits of his researches. In 1494, he quitted Italy, and entered the service of Louis XII of France, who made him his envoy to the Venetian senate; but, on the elevation of John de' Medici to the popedom, by the title of Leo X, Lascaris went to Rome, at the invitation of that pontiff, and, on the foundation of his Greek college there, was appointed its first principal, and superintendent of the Greek press. To promote the ends of this institution, of which the ascertaining and preserving the true pronunciation of the Greek language was one of the chief, Lascaris made a second journey into Greece, and brought back with him some youths of good families, who were to communicate and to receive instruction. The remainder of his life was divided between Paris, where he assisted Francis I in forming the royal library, and Rome, in which latter city he died of the gout, at the age of 90, in 1535. He published a translation of Polybius and of the Argonautics of Apollonius, together with a Greek Anthology (1494, folio); annotations on the works of Sophocles and Homer; four of the plays of Euripides; and a collection of epigrams and apophthegms, in Greek and Latin (Paris, 4to., 1527).

LASCARS; native Indian sailors, many of whom are in the service of the East India company.

LAS CASAS. (See *Casas*.)

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LAS CASES, Emanuel Auguste Dieu-donné, count of, marquis de la Caussade, the author of the well known *Mémorial de Sainte Hélène*, and distinguished for his faithful attachment to Napoleon, was born 1763, in the castle Las Cases, near Sorèze, in Languedoc, of an ancient Spanish family, to which the celebrated Bartholomew Las Casas (q. v.) belonged. He received his early education from the priests of the oratory at Vendôme, and afterwards joined the military school at Paris, which he left to enter the navy. He was present at the siege of Gibraltar; and, Oct. 20, 1782, he was in the sea-fight off the cape of Cadiz. After the peace, he visited America, Africa, the Isle of France and the Indies, for the purpose of acquiring experience. He then passed his examination in a very honorable manner, and obtained the place of lieutenant. On the breaking out of the revolution, he remained attached to the court party; emigrated, in 1791, to Worms, and resided alternately at Coblenz and Aix-la-Chapelle, where the French princes were surrounded by a brilliant train of followers; served as a member of the marine, in the campaign of 1792, under the duke of Brunswick; and, after its unhappy termination, went to England, destitute of every thing. In these circumstances, he supported himself by giving lessons in any branch of knowledge in which he could find pupils. After having been engaged in the fruitless expedition to Vendée, and the affair of Quiberon, where he escaped almost miraculously, he issued the prospectus of his *Historical Atlas*, which met with great encouragement, and was very profitable. He gladly seized on an opportunity to return to France, when Bonaparte invited back the emigrants. He lived in Paris, in a retired manner, occupied in writing and in bookselling. His principal work was his *Historical Atlas*, which appeared in 1804, and met with great success (another edition, 1820). He published it under the name of *Le Sage*, and while thus occupied enjoyed several years of tranquillity. But his ardent spirit was kindled with admiration of the emperor, and he became desirous to attach himself to him. The attack on Flushing, by the English, in 1809, gave him an opportunity to act. Napoleon appointed him chamberlain and master of requests in the council of state. When Holland was united to France, Napoleon sent him to that country to direct all matters connected with the marine. In 1811, he was employed to liquidate the public debt of the Illyrian provinces. He

was afterwards appointed to visit half of the French departments, to examine the poor-houses, prisons, hospitals, &c., &c. This duty was finished just at the time of Napoleon's return from Russia. A numerous national guard having been raised, on account of the entrance of the allies into France, Las Cases entered the 10th legion, which he commanded in the absence of its chief. The abdication of Napoleon and the restoration of Louis followed. Las Cases now went to England, in order to avoid being a witness to the course of affairs at Paris, and after his return lived in retirement. After Napoleon's return from Elba, he was appointed counsellor of state and president of the commission of requests. But when the battle of Waterloo made Napoleon's second abdication necessary, Las Cases begged to be permitted to follow him. Separated from his family, and accompanied only by his oldest son, he voluntarily shared the fate of the exile with resignation, independence and magnanimity. He remained until the end of 1816 with Napoleon at St. Helena, and acted as his secretary in his preparation of the history of his own life. He also instructed him in English. But a letter to Lucien Bonaparte, which he endeavored to send secretly to Europe, contrary to the commands of the English governor, occasioned the removal of himself and his son from Napoleon (Nov. 27, 1816). After a confinement of six weeks, he was sent to the cape of Good Hope, and was detained in close confinement for eight months, after which he was sent back to Europe. When he arrived in the Thames, his papers were taken from him, and he was not permitted to land, but was sent to Ostend. From thence he was carried through the Netherlands, and, in December, 1817, he first found a secure and quiet residence at Frankfort on the Maine. He then resided for a long time in Belgium, and thence went to Paris, where he lived retired, and arranged his papers which he had recovered from England. In 1823 appeared his *Mémorial de Sainte Hélène*, in eight volumes. This journal disclosed the severe treatment which Napoleon had received from sir Hudson Lowe, the governor. Sir Hudson having published an insulting answer to the count, in London, his son went to England, and challenged sir Hudson, who procured the removal of the young Las Cases from the country. In the eighth book of this Memorial, the count relates his own history from Dec. 31, 1816, on which day he left St. Helena.

He paints the severe treatment which he received from the British government in strong colors. Las Cases applied himself, with the greatest zeal, to accomplish the object, which, as he himself says, was the cause of his being forced to leave St. Helena. He wrote to the empress Maria Louisa, sent the letter open to prince Metternich, and then applied to the three allied sovereigns, and described to them Napoleon's painful situation. He also addressed a letter to lord Bathurst, the English minister, complaining of the treatment of Napoleon. At the same time, he wrote to all the members of Napoleon's family, and endeavored to obtain for the ex-emperor books and other comforts. He next applied to the congress of the sovereigns at Aix-la-Chapelle, in favor of the illustrious prisoner, and presented to them a letter from Napoleon's mother. Las Cases also wrote to La Harpe, the tutor of the emperor Alexander, on this subject. To all his requests and memorials he received no answer. He repeated his applications with as little success at the congress of Laybach. At this time Napoleon died.—The *Mémorial de Sainte Hélène* is rich in historical materials, but cannot be considered as a safe authority on the subject of Napoleon's history, because the author enlarged it, after it had been for a long time out of his hands, from memory, and adapted it to the existing state of things. From what Las Cases says, it is evident that Napoleon well knew that the work was written for publication, and the notes were taken in his presence, and at his request. The work has been translated into English. Napoleon placed many interesting papers in the hands of Las Cases, and, among others, his will. Since the first edition of his Memorial, Las Cases has published an abridgment. A new edition of his *Atlas historique, généalogique, chronologique et géographique*, also appeared at Paris, 1824, folio.

LASCY, Peter, count de ; a military officer, born in Ireland, in 1678. After the conquest of Ireland by William III, he entered the French service. After the peace of Ryswick, he entered into the Austrian army, and served against the Turks. He was next employed by the king of Poland, and then by Peter the Great of Russia. In 1709, he was wounded at Pultowa ; and he assisted in the taking of Riga, of which he was made governor. He was made a lieutenant-general in 1720. Catharine I appointed him governor of Livonia. He died in

1751, having attained the rank of field-marshal. The prince de Ligne published a collection of the works, and a journal of the campaigns, of marshal Lascy.

LASCY, Joseph Francis Maurice, count de, son of the foregoing, was born at Petersburg, in 1725. In 1744, he entered into the Austrian service, and made a campaign in Italy. He gradually rose to the rank of general, after having displayed his military talents at the battles of Lowowitz, Breslau and Hochkirchen; and, in 1760, he penetrated to Berlin, at the head of 15,000 men; for which bold exploit, he was made a commander of the order of Maria Theresa, and, in 1762, received the baton of marshal. Under Joseph II, he was a member of the council of war at Vienna, and was the author of the military regulations adopted by that prince. He was employed against the Turks in 1788, and again after the death of Laudohn. He died at Vienna, Nov. 30, 1801.

LA SERNA, José, viceroy of Peru, at the capitulation of the royalists, in 1824, commenced his career in the Spanish artillery, and, in 1809, served at Saragossa, under the celebrated Palafox, in the rank of lieutenant-colonel. Upon the appointment of general Pezuela to be viceroy of Peru, in 1816, La Serna was commissioned to succeed him in the command of the army of Upper Peru. He arrived at Arica in September, 1816, and, from that time until December, 1824, was prominent in the military operations of the contending parties. Bred to regular service in the peninsular war, he had no just idea of the system necessary to be followed in America; and therefore, in spite of his proficiency in tactics, he proved no match even for the half-armed *gauchos* of Buenos Ayres. In his first campaign, he advanced to Salta, but was compelled to retire in disorder. Finding his boasted plans of conducting the war *en règle* to fail him, La Serna asked and obtained leave to return to Spain. In 1819, he arrived in Lima to embark, and, while there, was promoted to the rank of lieutenant-general, in consequence of an expected invasion from Chile, and prevailed upon to remain. He received, accordingly, the direction of the military operations against San Martin; and, by means of a junta of his friends, appointed to advise the viceroy in the prosecution of the war, he became supreme in military matters. In January, 1821, a faction of the Spanish army deposed the viceroy Pezuela, and placed La Serna at the head of the government. The subsequent history of the war belongs to an-

other place. La Serna was wounded and taken prisoner at the battle of Ayacucho, Dec. 9, 1824, which put an end to his authority in Peru. On his return to Spain, he retired from public life, to reside in his native town of Xeres de la Frontera.

LASHER (*coltus scorpius*); a formidable-looking and singular fish, belonging to the great order of *acanthopterygiens* (Cuvier). It is about half a foot long, having the head and anterior part much larger in proportion than the posterior. The head is blackish, the back variegated with pale and black patches, placed transversely; sides divided by a rough longitudinal line, below which they are yellow, becoming whiter as they approach the belly. The gill-covers and head are furnished with formidable spines, which are capable of inflicting a painful wound, which circumstance appears to have been well known to the ancients: "*El capitis duro nociturus scorpius ictu.*" This fish has the faculty of swelling out its gill-covers and cheeks to an enormous size. It is found in all parts of the northern Atlantic ocean, being very frequent about Newfoundland and the Eastern States, where it is called *scoloping*. In Greenland, it forms a favorite article of food.

LASSA; a city of Asia, the capital of Great Thibet, little known to Europeans. It is chiefly distinguished as the residence of the Dalai-lama, or the great head of the Shaman religion. Hence it is usually crowded with royal and noble personages, from all parts of Asia, who come to present their homage, and to offer splendid presents to this earthly divinity. Lon. 91° 6' E.; lat. 29° 30' N. (See *Lama*.)

LASSO, Orlando di (Orlandus Lassus); one of the greatest musicians of the sixteenth century. He was born at Mons, in Hainaut, in 1530. Thuanus (De Thou) relates that he was carried off, while a child, on account of his fine voice. Ferd. Gonzaga, viceroy of Sicily, took him to Italy, and had him instructed in music. Having lost his voice in his 18th year, he was occupied three years, in Naples, as a teacher of music. He then became chapel-master in the Lateran church in Rome. Here he remained two years, and then returned to his native country to see his parents, whom, however, he did not find living. He then travelled, with Julius Cesar Brancaccio, to England and France, and again lived, for some years, in Antwerp, whence he went to Munich as chapel-master to Albert duke of Bavaria. Charles IX of France invited him to Paris; but Lasso learned, on his way to

that city, the death of the king, and was immediately reestablished in his place by duke William. He remained in this office until his death. Orlando was equally celebrated for his sacred and his secular music. He was the improver of figured counterpoint. His productions were numerous, but are, at present, rarely to be met with. His sons published a collection of his *motets*, under the name *Magnum Opus Musicum* (Munich, 1604, 17 volumes, folio). In the royal library at Munich, is the richest collection of his works.

LATAKIA (anciently *Laodicea*); a seaport in Syria, 50 miles south Antioch, 70 south-west Aleppo, lon. 35° 44' E.; lat. 35° 32' N.; population, in 1810, about 10,000; since reduced to 4000. It is a Greek bishop's see. It is situated at the base, and on the south side of a small peninsula, which projects half a league into the sea. Its port, like all the others on this coast, is a sort of basin, environed by a mole, the entrance of which is very narrow. It might contain 25 or 30 vessels, but the Turks have suffered it to be so choked up as scarcely to admit 4. Ships of above 400 tons cannot ride there, and hardly a year passes, that one is not stranded in the entrance. Notwithstanding this, Latakia carries on a great commerce, consisting chiefly of tobacco, of which upwards of 20 cargoes are annually sent to Damietta. The returns from thence are rice, which is bartered, in Upper Syria, for oil and cottons. This place is subject to violent earthquakes. One, in 1796, destroyed a great part of the city, and 2000 of the inhabitants; another, in 1822, overthrew a third of the buildings.

LATERAN; a square in Rome, so called from an ancient Roman family of the same name. Nero put to death the last possessor, Plautius Lateranus, and seized his estates. Thus the Lateran palace became the property of the emperor. Constantine the Great gave it to the popes, who occupied it for 1000 years, until the removal of their residence from Rome to Avignon. The church of St. John of Lateran, connected with this palace, was built by Constantine. It is the episcopal church of the pope, and the principal church of Rome; hence the inscription over the principal door—" *Omnium urbis et orbis ecclesiarum mater et caput* (the mother and head of all the churches of the city and the world). It is also called the *Lateran*. Its great antiquity, the recollection of 11 councils which have been held in it, the rare relics which are preserved in it, and its splendid architect-

ure, render this church particularly worthy of observation. At the portal is the balcony, from which the pope bestows his blessing upon the people. At the chief altar of this church, none but the pope can read mass; for within it is a wooden one of great antiquity, upon which the apostle Peter is said to have read mass. In this church, also, are to be seen the two stools of red marble, which have an opening in the middle of the seat, and which are said to have been used for the investigation of the sex of the newly elected pope; but, in the baths of Caracalla, where they were found, they were probably put to an entirely different use. At the present time, every newly elected pope takes solemn possession of this church, accompanied by a cavalcade. Upon the Lateran Place stands a chapel, to which belongs the *Scala santa* (a staircase of 28 steps, which is said to have come from the house of Pilate, and which believers ascend on their knees), and the chapel of *San Giovanni in Fonte*, built by the emperor Constantine, the cupola of which consists of eight porphyry pillars, considered the most beautiful in Rome.

LATE WAKE; a ceremony used at funerals, in some parts of the Highlands of Scotland. The evening after the death of any person, the relations and friends of the deceased meet at the house, attended by a bagpipe or fiddle. The nearest of kin, be it wife, son or daughter, opens a melancholy ball, dancing and *greeting* (i. e. crying violently) at the same time, and this continues till daylight; but with gambols and frolics, among the younger part of the company. If the corpse remains unburied for two nights, the same rites are renewed.

LATIMER, Hugh, an eminent English prelate and reformer in the sixteenth century, was the son of a respectable yeoman at Thurcaston, in Leicestershire, where he was born about the year 1470. He received his early education at a country school, whence he was removed to Cambridge in his 14th year. He first became openly obnoxious to the enemies of innovation, by a series of discourses, in which he dwelt upon the uncertainty of tradition, the vanity of works of supererogation, and the pride and usurpation of the Roman hierarchy. At length, the bishop of Ely interdicted his preaching within the jurisdiction of the university; but doctor Barnes, prior of the Augustines, being friendly to the reformation, licensed Latimer to preach in his chapel, which was exempt from episcopal interference. The

progress of the new opinions was represented to cardinal Wolsey, who, at the importunity of archbishop Warham, created a court of bishops and deacons to put the laws in execution against heretics. Before this court, Bilney and Latimer were summoned, and the former, who was deemed the principal, being induced to recant, the whole were set at liberty; and Latimer was licensed, by the bishop of London, to preach throughout England. Bilney afterwards disclaimed his abjuration, and suffered martyrdom at Norwich. The fate of his friend by no means intimidated Latimer, who had the courage to write a letter of remonstrance to Henry VIII, on the evil of prohibiting the use of the Bible in English. Although this epistle produced no effect, Henry presented the writer to the living of West Kinton, in Wiltshire. The ascendancy of Anne Boleyn, and rise of Thomas Cromwell, proved favorable to Latimer, and he was, in 1535, appointed bishop of Worcester. It was then the custom for bishops to make presents, on new-year's day, to the king, and, among the rest, Latimer waited at court with his gift, which, instead of a purse of gold, was a New Testament, having the leaf turned down to this passage—"Whoremongers and adulterers God will judge." Henry was not, however, offended; and, when the sturdy prelate was, some time after, called before him to answer for some passages in a sermon which he had preached at court, he defended himself so honestly, that he was dismissed with a smile. The fall of Anne Boleyn and Cromwell prepared the way for reverses, and the six articles being carried in parliament, Latimer resigned his bishopric, rather than hold any office in a church which enforced such terms of communion, and retired into the country. Here he remained in privacy, until obliged to repair to London for medical advice. There he was discovered by the emissaries of Gardiner, and imprisoned for the remainder of Henry's reign. On the accession of Edward, he was released, and became highly popular at court by his preaching, during that reign, but never could be induced to resume his episcopal functions. He took up his abode with archbishop Cranmer, at Lambeth, where his chief employment was to hear complaints and procure redress for the poor. Soon after Mary ascended the throne, Latimer was cited to appear before the council, in doing which, an opportunity was afforded him to quit the kingdom. He, however, prepared with alacrity to

obey the citation, and, as he passed through Smithfield, exclaimed, "This place has long groaned for me." About the same time, Cranmer and bishop Ridley were also committed to the Tower, and the three prelates were confined in the same room. From the Tower they were conveyed to Oxford, and confined in the common prison, preparatory to a disputation, in which Latimer behaved with intrepidity and simplicity, refusing to deliver any thing more than a free confession of his opinions. The three prelates, although condemned, remained in prison 16 months, chiefly because the statutes under which they had been tried had been formally repealed. In 1555, however, new and more sanguinary laws having been enacted, in support of the Roman religion, a commission was issued by cardinal Pole, the pope's legate, to try Latimer and Ridley for heresy. Much pains were taken, during this second trial, to induce them to sign articles of subscription, which they steadfastly refused, and were, in consequence, delivered over to the secular arm, and condemned to the flames. This sentence was put in execution about a fortnight after their condemnation, Oct. 16, 1555. At the place of execution, having thrown off the old gown which was wrapped about him, Latimer appeared in a shroud, prepared for the purpose, and, with his fellow-sufferer, was fastened to the stake with an iron chain. A fagot, ready kindled, was then placed at Ridley's feet, to whom Latimer exclaimed, "Be of good comfort, master Ridley, and play the man. We shall this day light such a candle, by God's grace, in England, as, I trust, shall never be put out." He then recommended his soul to God, and, with firmness and composure, expired. His preaching was popular in his own times, in which his simplicity, familiarity and drollery were highly estimated.

LATIN EMPIRE. (See *Byzantine Empire*.)

LATINS (*Latini*); an ancient people of Latium in Italy, who sprung from a mixture of the aborigines with Arcadian-Pelasgian and Trojan colonists. The derivation of their name is unknown. It is not probable that they received it from king Latinus. Janus, Saturn, Picus and Faunus, who were deified by their subjects, are represented to have been the most ancient Latin kings. These names were probably appellations of the old Pelasgian divinities. During the reign of Faunus, Hercules and Evander are said to have arrived in Latium; the latter

taught the aborigines the use of the alphabet, music, and other arts, and also succeeded Faunus in the government. About 60 years afterwards lived king Latinus, at whose court Æneas (q. v.) arrived, married his daughter Lavinia, and succeeded to his throne. The city of Alba Longa was built by Ascanius, the son of Æneas by a former marriage, and made the seat of the Latin kings. Henceforward we know nothing of the history of Latium, whose kings all bore the surname of *Sylvius*, until Romulus and Remus laid the foundations of a new city. Jealousy kindled a war between these two sister states, the Latin and the Roman, which terminated with the subjugation of the Latins and the demolition of their capital. Rome became the capital of all Latium, when king Servius united the Latins with the Romans in a permanent confederacy. From this epoch, we may date the beginning of the greatness and splendor of Rome; for, without the valor and friendship of the Latins, she would never have obtained the dominion of the world. Tarquinius Superbus endeavored to draw this alliance still closer; but, after his banishment, he excited the Latins to rise against Rome. This war of the Romans with the Latins, the first since the alliance which had been made between them, was decided in favor of Rome by the valor of the dictator, and the treaty was renewed. In the year of Rome 414, there was a still more dangerous rupture between them. The Latins made war upon the Samnites, who implored the assistance of the Romans. A dispute arose between Rome and Latium, in which the latter went so far as to demand that one consul and half of the senate should be Latins. This demand was indignantly rejected by the Romans, and, in the war which followed, the Latins were reduced after a very severe struggle. When the Romans had nearly obtained the dominion of the world, the Latins made another attempt to regain their freedom, by engaging in the Social war (A. U. C. 663), and they succeeded so far as to recover many of their privileges. (See *Rome*, and *Latium*.) Niebuhr's History of Rome (introductory chapter) contains a critical examination of the origin of the Latins.

LATINUS; a son of FAUNUS by Marcia. He was king of the aborigines in Italy. He married Amata, by whom he had a son and a daughter. The son died in his infancy, and the daughter, called Lavinia, was secretly promised in marriage, by her mother, to Turnus, king of the Rutuli, one

of her most powerful admirers. The gods opposed this union, and the oracle declared that Lavinia must become the wife of a foreign prince. The arrival of Æneas in Italy seemed favorable to this prediction, and Latinus, by offering his daughter to the foreign prince, and making him his friend and ally, seemed to have fulfilled the commands of the oracle. Turnus, however, disapproved of the conduct of Latinus; he claimed Lavinia as his lawful wife, and prepared to support his cause by arms. Æneas took up arms in his own defence, and Latium was the seat of the war. After mutual losses, it was agreed that the quarrel should be decided by a combat between the two rivals, and Latinus promised his daughter to the conqueror. Æneas obtained the victory, and married Lavinia. Latinus soon after died, and was succeeded by his son-in-law. This is the form of the legend in the Æneid; other accounts are different.

LATITUDE, GEOGRAPHICAL; the distance of a place, on the surface of the earth, from the equator, measured by that arc of the meridian of the place which is intercepted between the place and the equator. Geographical latitude is either north or south, according as the place, reckoned from the equator of the earth, lies towards the north or the south pole. Latitude is the measure of the angle formed by a vertical line drawn from the place to the centre of the earth and the plane of the equator. Since, however, this vertical line, if continued to the heavens, passes through the zenith of the place, and the plane of the terrestrial equator, continued to the heavens, meets the celestial equator, the latitude of a place is also determined by the distance between the celestial equator and the zenith, or, in other words, by the complement of the altitude of the equator; and, as the complement of the altitude of the equator is the altitude of the pole, the latitude of a place is equal to the altitude of the pole at that place. Places situated in the equator itself have neither latitude nor altitude, because their two poles lie in the horizon. Nor can the latitude of a place be more than 90°, because the altitude can never exceed 90°, that is to say, because the pole, at the most, can only be in the zenith itself. Latitudes, together with longitudes (q. v.), serve to fix the situation of places on the globe, and their distance from each other. The determination of local positions is the foundation of geography, and of the correct projec-

tion of maps.—In astronomy, *latitude* is used to signify the distance of a heavenly body from the ecliptic, which distance is measured by the arc of a great circle (circle of latitude), perpendicular to the ecliptic, which is intercepted between the ecliptic and the body. Here, also, latitude is north and south. A heavenly body in the ecliptic has no latitude, for which reason the sun has no latitude, and that of the planets is very small. The latitude of a heavenly body can never exceed 90°. It is determined by the right ascension and declination. The latitude of stars is laid down in the lists of the fixed stars. An extensive list of the geographical latitudes of places is contained in the Berlin Collection of Astronomical Tables, vol. i, p. 43 et seq.—*Heliocentric latitude of a planet*, is its latitude or distance from the ecliptic, such as it would appear from the sun. This, when the planet comes to the same point of its orbit, is always the same, or unchangeable.—*Geocentric latitude of a planet*, is its latitude as seen from the earth. This, though the planet be in the same point of its orbit, is not always the same, but alters according to the position of the earth in respect to the planet. The latitude of a star is altered only by the aberration of light, and the secular variation of latitude.

LATITUDINARIAN, among divines, denotes a person of moderation with regard to religious opinions, in contradistinction to the rigid adherents to particular doctrines. This name was first given, by way of distinction, to those excellent persons, in England, who, about the middle and towards the close of the seventeenth century, endeavored to allay the contests that prevailed between the more violent Episcopalians, on the one hand, and the more rigid Presbyterians and Independents, on the other, and also between the Arminians and Calvinists. At present, it generally denotes one who departs, in opinion, from the strict principles of orthodoxy.

LATIUM; the principal country of ancient Italy, and the residence of the Latins. The limits, which appear to have changed at different periods, are generally represented to be the Tiber on the north, and the promontory of Circeii (Monte Circello) on the south; but this is probably too extensive. According to Strabo, there were, besides the Latins, Rutuli, Volsci, Hernici and Æqui in this region. The actual extent of Latium, at the time of the building of Rome, may have

amounted, at the most, to about 46 miles in diameter, and the actual boundaries were probably the Tiber on the west, the Anio on the north, mount Algidum on the east, and, on the south, the city of Ardea, which was situated at the distance of 160 *stadia* from Rome. Latium afterwards extended to the river Liris (Gargliano), but the northern and eastern boundaries remained the same. In the earliest times, there was a large laurel grove situated on the coast, at the mouth of the Tiber, which extended as far as the city of Laurentum. This grove not only gave the name to the city, but also to the surrounding country, which was hence called *Laurentinus ager*, and the inhabitants were styled *Laurentes*. This grove is said to have been standing in the time of the emperor Commodus. Between the Tiber and the city of Laurentum was the place where Æneas pitched his camp, which bore the name of Troy. To the eastward of this place, 24 *stadia* from the Tiber, was the city of Laurentum. Farther on, lay the little river Numicus and the sources of the Juturna; and still farther to the east, was situated the city of Lavinium. Beyond the sources of the Numicus and the Juturna, was the mountain upon which, 30 years after the building of Lavinium, was placed the city of Alba Longa. Behind this, towards the Hernici, lay Aricia; still farther above, in the extreme northerly corner of Latium, was the city of Præneste; towards the northern extremity of the same province, was the city of Tibur, and between these two cities and Rome, were Gabii and Tusculum. All these cities were colonies of Alba Longa. The first colony of the Romans was Ostia, established by Ancus Martius, below Rome. In the time of the Romans, Latium was very thinly inhabited; and, 100 years after the building of Rome, complaints began to be made on account of the desolation of the country and its unhealthy atmosphere. With the enormous wealth which the Romans acquired from the conquest of Greece and Asia, villas, which contained great numbers of slaves, were built in this desolate region, and the air was thus rendered somewhat healthier. In this way cities and villages sprung up around Rome, which were afterwards deserted and destroyed. The rivers of Latium were the Tiber, the Liris, the Anio, Numicus, Ufens, Amasenus and Almo. The Ufens flowed through the Pontine marshes. These marshes were known from the earliest times, and extended between the rivers Ufens and

Nymphæus to a great distance. There were also some lakes in Latium, of which lake Regillus was the principal. The mountains of this province were, with few exceptions (as, for example, the Alban mountain and mount Algidum) merely hills. (For a minute account of this region, see the *Description of Latium*, with 20 engravings; and a map of the Campagna di Roma, London, quarto; and Cramer's *Description of Ancient Italy*, Oxford, 1826.)—The Latin right (*jus Latii*) originally belonged to the Latin allies of Rome, but was afterwards extended to some other states on their accession to the alliance. The members of these states were not enrolled among the Roman citizens, but had a census of their own. They were required to raise auxiliary troops, which did not serve in the Roman legion, but as a separate force. They had the right of voting at Rome, but under certain limitations, and they elected their own magistrates. All who enjoyed neither the Roman citizenship (*civitas Romana*), nor the Latin right, were called *foreigners* (*peregrini*).

LATONA (by the Greeks called *Leto*, in the Doric dialect *Lato*), daughter of Cœus and Phœbe (according to some, of Saturn), became the mother of Apollo and Diana by Jupiter. During her pregnancy, she was persecuted by Juno, by whose command the dragon Pytho threatened her everywhere with death and ruin, and the earth was not permitted to allow her a place for her delivery. After long wanderings, she found rest on the island of Delos (q. v.), which rose from the sea to receive her. The giant Tityus, having attempted to offer her violence, was killed by Apollo and Diana. According to another fable, this giant was struck dead by Jupiter, with lightning, before her pregnancy. Jupiter also changed some Lycian peasants into frogs, because they would not permit her to drink, on her flight from Delos, from which Juno had again driven her (Ovid's *Metam.* vi, 4). Latona is represented as a mild, benevolent goddess, in a sea-green dress. With Diana she cured the wounded Æneas, and crowned him with glory. When Diana fled to Olympus, from the anger of Juno, Latona carried to her her quiver and arrows, which she had left behind. Latona was worshipped chiefly in Lycia, Delos, Athens, and other cities of Greece. In Crete, a festival was celebrated in honor of her, called *Ecdysia*. She is sometimes considered as the symbol of night, because the sun proceeds, as it were, from the

night. Hence, also, some derive her name from the Greek *λανθάνειν* (to hide).

LATOUR D'AUVERGNE-CORRET, Theophilus de, one of the bravest soldiers mentioned in military history, was born in 1743, at Carhaix, in the department of Finisterre (Brittany), early decided to become a soldier, and was aid-de-camp to the duke De Crillon at the siege of Mahon. When the revolution broke out, he was among the first to rally round its standard, and distinguished himself among 8000 grenadiers, in the army of the Pyrenees. Higher appointments were offered to him, but he always declined, declaring that he was only fit to command a company of grenadiers. His corps generally made the van-guard, and was called the *infernal column*. After the peace of Bâle, he fell into the hands of the English, and was a prisoner a year in England. After his exchange, he occupied himself with literary labors, and, in 1799, again bore arms instead of a son of his friend Lebrigard, fought under Massena, in Switzerland, and fell at Newburg, in 1800, while attached to the army of the Rhine, having been, not long before, named first grenadier of France by the first consul. A monument was erected on the spot where he fell. His heart was embalmed, and carried, in a silver box, by one of the company in which he had served. His name was always called, and the bravest grenadier answered—"Died on the field of honor." As an author, he made himself known by a singular work on the early history of Brittany.

LATOUR-MAUBOURG, Victor Fay, marquis de, born at Vivarais, of an ancient family, in 1756, was in the body-guard of the king, at the breaking out of the revolution, defended the royal family on the terrible night of Oct. 5, and emigrated after Aug. 10, 1792. (See *France, History of*.) Having returned, in consequence of the amnesty proclaimed after the 18th Brumaire, he entered the service of the republic, and distinguished himself in the campaigns of Egypt, Austria, Prussia and Spain. His services at Austerlitz, Friedland, and on other occasions, procured him the title of count of the empire, and general of division. In 1812, he was employed against Russia, and, at the battle of Leipsic, lost a leg. Louis XVIII created him peer of France in 1814. During the hundred days, he remained in retirement, and, after the second restoration, was appointed commander of the order of St. Louis, and knight of the order of the Holy Ghost. In 1817, the port-folio of the war

department was intrusted to him; but his opinions were too liberal to satisfy men who made his *jambe illégitime* a matter of reproach to him, and, in 1821, he was obliged to surrender it to the Villèle ministry.—2. *Charles César Fay*, count de, brother of the preceding, born 1758, was a member of the estate of nobles in 1789, and among the first to join the third estate, when it declared itself the national assembly. He advocated constitutional doctrines, and served under Lafayette, whose captivity he shared. In 1801, he was a member of the *corps législatif*; in 1806, of the senate; and, after the restoration (1814), was created a peer of France. Having sat in the chamber of peers during the hundred days, he lost the peerage, on the second restoration, but received it again in 1819.—His eldest son has been ambassador to Constantinople, Würtemberg, London, &c.; his second son, Rodolphe, has been distinguished in the military service; and his third, who married the eldest daughter of Lafayette, has also served, and has received the cross of St. Louis.

LATREILLE, Peter Andrew, a very distinguished and active naturalist, was born in 1762, at Brives, department Corrèze. From early youth, he devoted himself to the study of natural history, and is, at present, professor of zoology at the museum of natural history at Paris, member of the academy, of the legion of honor, &c. Of his works on natural history, the most important are *Précis des Caractères génériques des Insectes* (Brives, 1797); *Histoire nat. des Salamandres de France* (with engravings, Brives, 1800); *Histoire nat. des Singes, faisant Partie de celle de Quadrupèdes de Buffon* (2 volumes, Brives, 1801); *Essai sur l'Histoire des Fourmis*, &c. (with engravings, Brives, 1802); *Histoire nat. des Reptiles, faisant Partie du Buffon de M. Castel* (4 volumes, Brives, 1802); *Genera Crustaceorum et Insectorum* (with 18 colored engravings, 4 volumes, Brives, 1806—1809); *Considérations gén. sur l'Ordre naturel des Animaux, composant les Classes des Crustacées, des Arachnides et des Insectes* (Brives, 1810); *Mémoires sur divers Sujets de l'Hist. nat. des Insectes, de Géographie ancienne et de Chronologie* (Brives, 1819); *Familles naturelles du Règne Animal* (Brives, 1825.) Latreille is also one of the most active contributors to the *Nouv. Dictionnaire d'Histoire nat.*, to the *Annales du Muséum d'Hist. nat.*, and other works.

LATROBITE; a mineral named for reverend C. I. Latrobe. It is found massive and crystallized; but the crystals not well

defined; color, pale pink; scratches glass; specific gravity, 28. It is composed of

Silex,	44.65
Alumine,	38.21
Lime,	8.29
Potash,	6.57
Oxide of manganese,	3.16

It is found at Amitok island, near the coast of Labrador, and is accompanied by mica and carbonate of lime.

LATTAIGNANT, Gabriel Charles, abbé de, a poet, the memory of whose songs has not yet perished in France, and who rendered himself known by the popular opera *Fanchon*, was born in Paris, towards the end of the seventeenth century. He was canon at Rheims, and counsellor of the parliament of Paris, but united great gaiety with his serious occupations. After having taken part in all the pleasures of life, he retired to a monastery, and died 1779. His poems were published in 4 volumes, 12mo., which were followed, after his death, by his songs and writings not before printed.

LATUDE, Henri Mazers de, born in 1724, at Montagnac, in Languedoc, was imprisoned, when 20 years old, in the Bastille, in the reign of Louis XV, because, in order to gain the favor of Mad. de Pompadour, he had persuaded her that an attempt was to be made on her life, by a box containing the most subtle poison. The box actually arrived, but contained nothing but ashes, sent by Latude himself. His repeated attempts to escape rendered his confinement more rigorous, and he remained in prison 35 years. He was delivered from his confinement in 1779. He then wrote his memoirs, which became a formidable weapon in the hands of the revolutionary party. The national assembly decreed him a pension, which was afterwards, however, withdrawn. The heirs of Amelot and Mad. de Pampadour were sentenced to make him indemnification. He died in 1804, 80 years old.

LAUD, William, archbishop of Canterbury, in the reign of Charles I, born in 1573, received his education at St. John's college, Oxford, of which he became a fellow in 1593. He took priest's orders in 1601, and, the following year, preached a divinity lecture, in which he maintained the perpetual visibility of the church of Rome until the reformation, which doctrine being disapproved by doctor Abbot, master of University college, the foundation of that animosity was laid, which ever after subsisted between them. In 1608, he was made chaplain to Neile, bishop of

Rochester, who gave him the rectory of Cuckstone, in Kent; and he soon after preached his first sermon before James I. In 1611, he became president of his college, and one of the king's chaplains, and, in 1617, accompanied James I to Scotland, to aid him in his attempt to bring the church of Scotland to a uniformity with that of England. In 1620, he was installed a prebend of Westminster, and, the next year, nominated to the see of St. David's. About this time, James took upon himself to interdict the introduction into the pulpit of the doctrines of predestination, election, the irresistibility of free grace, or of any matter relative to the powers, prerogatives and sovereignty of foreign princes. These measures being attributed to the counsels of bishop Laud, the Calvinistic or Puritanic party were much incensed at his conduct. On the accession of Charles I, Laud's influence, by the countenance of Buckingham, became very great; and he was ordered to furnish the king with a list of all the divines in the kingdom, against whose names he marked O. or P., to signify Orthodox or Puritan. In 1626, he was translated to the see of Bath and Wells, and, in 1628, to that of London. On the sequestration of archbishop Abbot, in consequence of having accidentally shot a game-keeper, Laud was appointed one of the commissioners for exercising the archiepiscopal jurisdiction; and, being a zealous supporter of the hated administration of Buckingham, became in the highest degree unpopular. On the assassination of that favorite by Felton, bishop Laud, suspecting that some members of parliament might be privy to the deed, prevailed on the king to send to the judges for their opinion, "whether, by law, Felton might not be racked?" Bishop Laud was also the most active member of the high commission court, the arbitrary and severe proceedings of which were so justly odious to the nation. In 1630, he was elected chancellor of the university of Oxford, to which he was a great benefactor, and which he enriched with an invaluable collection of manuscripts, in a great number of languages, ancient, modern and Oriental. In 1633, he attended Charles into Scotland, who went there to be crowned; and, on his return, he was promoted to the see of Canterbury, become vacant by the death of archbishop Abbot. On the same day, an agent from the court of Rome came to him privately, and offered him a cardinal's hat—a fact which shows how strongly he was suspected of

a predilection for the church of Rome. He, however, declined the proposal, feeling, as he expresses himself in his diary, "That something dwelt within him which would not suffer that, till Rome were other than it is." In 1634, he commenced a metropolitan visitation, in which the rigor of his proceedings, to produce conformity, was exceedingly unpopular. In 1635, he was appointed one of the commissioners of the treasury, in which situation he remained a year. The prosecution of Prynne, Burton and Bastwick, for libel, took place in 1632, the odium of which, and the severe sentences that followed, rested principally upon him. In 1637, he procured a decree of the star-chamber, limiting the number of printers, and forbidding the printing of any book not licensed by the bishop of London or archbishop of Canterbury, for the time being, or by the chancellor and vice-chancellor of the universities. Catalogues of all books from abroad were also to be furnished to the same authorities; and so arbitrary was the conduct of Charles's ministers, at this period, that numbers, both of clergy and laity, sought to quit the country. A proclamation was issued to restrain them, unless certificated to be conformable to the discipline of the church. After a lapse of 12 years, a parliament was convened in April, 1640; the commons commenced by appointing committees of religion and grievances, on which it was suddenly dissolved, after sitting only three weeks. All sorts of means were then put in force to raise supplies, by loan, benevolence, ship-money, &c., those who refused payment being fined and imprisoned by the star-chamber or council-table. A clerical convocation was also authorized by the king, to sit, independent of the parliament. This body, besides granting subsidies, prepared a collection of constitutions and canons ecclesiastical, which, being approved by the privy council, was made public, and gave such general disgust to the moderate of all parties, and produced so great a number of petitions to the privy council, that Charles was obliged to suspend them. On the calling of the long parliament, the new canons were summarily disposed of, as subversive, both of the rights of parliament, and of the liberties and property of the subject, and the long gathering storm immediately burst over the head of the archbishop. The next day, articles presented against him by the Scottish commissioners were read in the house of lords, which when referred to the commons, a motion was put and carried, that

he had been guilty of high treason. The celebrated Denzil Holles was immediately sent to the house of lords, to impeach him in the name of all the commons of England, and he was delivered into the custody of the black rod. Feb. 26, 1641, 14 articles of impeachment were brought up from the commons, and he was committed to the Tower. Soon after his commitment, the house of commons ordered him, jointly with those who had passed sentence against Prynne, Bastwick and Burton, to make them satisfaction for the damages which they had sustained by their sentence and imprisonment. He was also fined £20,000 for his proceedings in the imposition of the canons, and was otherwise treated with extreme severity. He remained in prison three years before he was brought to trial, which at length, on the production of 10 additional articles, took place March 12, 1643—44, and lasted 20 days. Many of the charges against him were insignificant and poorly supported; but it appeared that he was guilty of many arbitrary, illegal and cruel actions. His own defence was acute and able; and his argument—that he could not be justly made responsible for the actions of the whole council—if not absolutely a legal, was a strong moral defence. The lords were still more staggered by his counsel showing that, if even guilty of these acts, they amounted not to high treason. A case was made for the judges, who very much questioned if they were so, and the peers deferred giving judgment. On this delay, the house of commons passed a bill of attainder, Jan. 4, 1644—45, in a thin house, in which the archbishop was declared guilty of high treason, and condemned to suffer death—as unjustifiable a step, in a constitutional point of view, as any of which he was accused. To stop this attainder, he produced the king's pardon, under the great seal; but it was overruled by both houses, and all he could obtain by petitioning, was to have his sentence altered from hanging to beheading. He accordingly met his death with great firmness, Jan. 10, 1644—45, on a scaffold erected on Tower-hill, in the 72d year of his age. His warmest admirers admit his extreme rashness, and little is left which can be fairly pleaded for his severity and violence, except the probability that he acted on principles which he deemed correct. Much praise has been bestowed upon his piety, but his diary shows it to have been mingled with much puerility and superstition; his dreams being regularly recorded, as

well as the hopes and fears which they excited. Speaking of his learning and morals, Hume observes, "that he was virtuous, if severity of manners alone, and abstinence from pleasure, could deserve that name. He was learned, if polemical knowledge could entitle him to that praise." Among his works are sermons; Annotations upon the Life and Death of King James; his Diary, edited by Wharton; the Second Volume of the Remains of Archbishop Laud, written by himself; *Officium Quotidianum*, or a Manual of private Devotion; and a Summary of Devotion.

LAUDER, William, a literary impostor, who attempted to prove Milton a plagiarist, was a native of Scotland. In 1747, he published, in the Gentleman's Magazine, an Essay on Milton's Use and Imitation of the Moderns, the object of which was to prove that Milton had made free with the works of certain Latin poets of modern date, in the composition of his Paradise Lost. Mr. Douglas, afterwards bishop of Salisbury, in a letter, entitled Milton vindicated from the Charge of Plagiarism, showed that the passages which had been cited by Lauder, from Massenius, Staphorstius, Taubmannus, and others, had been interpolated by Lauder himself, from Hogg's Latin translation of the Paradise Lost. He subsequently acknowledged his fault, assigning the motives which prompted it. (See Nichol's *Literary Anecdotes*.)

LAUDERDALE, James Maitland, earl of, was born in 1759, studied in Glasgow, was, by family interest (being then lord Maitland), brought into parliament for the Scotch boroughs of Lauder, Jedburg, &c., and immediately joined the opposition, with whom he acted till the death of his father, in 1789. On succeeding to the title of Lauderdale, he was chosen one of the 16 peers of Scotland. He opposed the Russian armament, condemned the measures taken against Tippoo Saib, and, when the revolution in France broke out, hailed it as a most fortunate event. He was a witness of the dreadful massacres which took place in September, 1792, and allied himself with the Brissotines, or moderate republicans. With Brissot, their leader, he contracted a warm friendship. On his return, he opposed the war with France, and the other measures of the Pitt administration. Having lost his seat as one of the 16 peers of Scotland, he attempted to get into the house of commons by a surrender of his peerage, which he thought was allowable by the Scottish law, that, by that means, he might become a

commoner, and be returned to the house of commons. He became a citizen of London, and was made free of the needle-makers' company; but, standing for sheriff, he did not meet with support from the livery, and he then contented himself with writing his sentiments and publishing them. He published several pamphlets on finance, India affairs, and paper currency, among the principal of which is an Inquiry into the Nature and Origin of public Wealth (1804), which has reached three editions. When the Whigs came into administration, in 1806, lord Lauderdale was created a baron of Great Britain, and received a seat in the privy council, and the custody of the great seal of Scotland. When his friends went out of office, he retired with them. His lordship then attached himself to the interests of the princess Charlotte of Wales. Lord Lauderdale is a man of talents, and of intrepid character, but of great impetuosity of temper.

LAUDON. (See *Loudon*.)

LAUENBURG, or SAXE-LAUENBURG; a Danish duchy, belonging to the German confederacy. It formerly belonged to Hanover, passed with that country, in 1803, under French government, was restored, in 1813, to its former state; in 1816, was ceded to Prussia. The Prussian government afterwards gave it up to Denmark. (See *Kiel*, *Peace of*.) It contains, at present, 400 square miles, with 32,000 inhabitants, is situated on the right bank of the Elbe, and is surrounded by the territories of Hamburg, Lübeck, Hanover, Mecklenburg and Holstein. Grazing and tillage, together with the transit trade, are the sources of its wealth. It exports much wood for fuel and building. The toll on the Elbe, paid in the city of Lauenburg, is said to amount to 50,000 Danish dollars annually. According to the constitution, confirmed by the king, 22 landholders and the three cities have each one vote in the diet. The free peasants in 111 villages are not represented. Ratzeburg, the capital, is situated in a lake.

LAUMONITE; a mineral, named in honor of Gillet de Laumont. It occurs in aggregated crystalline masses, deeply striated, or in separate crystals, of several varieties of form, and sometimes in that of its primary crystal, an oblique rhombic prism, of which the inclination of the terminal plane is from one acute angle to the other. It is white, sometimes with a tinge of red, and is translucent, and hard enough to scratch glass. By expo-

sure to the air (even a very short time), it becomes opaque, tender, and eventually falls into a white powder; specific gravity, 2.2. Before the blow-pipe, it intumesces, and fuses with difficulty into a colorless glass. It is composed of silic 48.50, alumine 22.70, lime 12.10, and water 16.00. It was first noticed in the lead-mines of Huelgoet, lining the cavities of veins. It has since been found in trap in Ireland and Faroe, Transylvania, Nova Scotia, and in the U. States, near New Haven, Connecticut.

LAUNCH. (See *Boat*.)

LAUNCHING. (See *Ship*.)

LAURA; Petrarch's mistress. It was long erroneously supposed that this lady, who has been celebrated in the sweetest strains of poetry, was only an allegorical person, or a descendant of the houses of Chabaud and Sade, who remained single, and lived at Vaucluse, where the poet had an opportunity of becoming acquainted with her. According to the investigations of the abbé Sade, *Mémoires pour la Vie de François Pétrarque* (Amsterdam, 1764—67, 3 vols., 4to.); of Tiraboschi, in his *History of Italian Literature*; of Baldelli, *Del Petrarca* (Florence, 1797, 4to.); of the abbé Arnauv, *Pétrarque à Vaucluse*, and *Retour de la Fontaine de Vaucluse* (Paris, 1803, and Avignon, 1805); of Guerin, *Description de la Fontaine de Vaucluse* (Avignon, 1804, 12mo.); and, lastly, of Ginguené, in his *Histoire littéraire d'Italie* (2d vol.), Laura was descended from the old Provençal family of Noves, which has now been extinct 300 years, and was the daughter of the chevalier Audibert Noves, who lived in Avignon. She was born at the village of Noves, or in Avignon, in 1307 or 1308, and, after the death of her father, who left her, his oldest daughter, a large fortune, she married (1325) the young Hugh de Sade, of a distinguished family in Avignon. Laura was one of the most beautiful women of the city, which, being at that time the residence of the pope, attracted many strangers. Among them was the young Petrarch (q. v.), whose ancestors had been banished from Tuscany, during the quarrels of the Guelphs and Ghibelines. It was on the 6th of April, 1327, on Monday of the passion-week, at 6 o'clock in the morning, that Petrarch, then 23 years old, first saw, as he himself says, the beautiful Laura, in the church of the nuns of St. Clara; and, from that moment, he was seized with a passion as violent as it was lasting. His vain efforts to lead her from the path of duty, and his ineffectual at-

tempts to conquer a hopeless passion, plainly show that his love was by no means Platonic. He acknowledges, however, that he never received the smallest favor from her, and bestows the highest praise on her virtue. Laura certainly felt flattered by the devotion of the young poet, and was polite and kind towards him, as long as she saw nothing in his attentions to alarm her; but treated him with severity whenever he endeavored to express the warmth of his passion. For more than 20 years, Petrarch sang the object of his love, and endeavored to excite a reciprocal passion, or to conquer his own. During this long period, by alternate severity and kindness, Laura succeeded in retaining him a captive to her charms, without ever suffering the least stain on her honor. She never saw the poet in her own house, because the manners of the time, as well as the jealousy of her husband, forbade it. After her marriage, she always lived at Avignon, in the house of her father-in-law, situated on the Rhone, below the papal palace; and it was from the summit of the rock, on which the palace was built, that Petrarch delighted to gaze on her, as she walked in her garden. In the same year (1334), that Petrarch went to Vaucluse, to recover his peace of mind in this lovely solitude, Laura was attacked by an epidemic disease, which made great ravages; but she recovered, and was dearer than ever to the poet. In 1339, the painter Simon of Siena, who had been called to Avignon to adorn the papal palace, painted Laura's picture, and gave it to the poet, who repaid him with two sonnets. Whether Laura consented to have her portrait taken for Petrarch, or whether he only obtained a copy, or whether the image of the beautiful lady was so deeply stamped on the mind of the painter, that he could afterwards paint her from recollection, cannot now be ascertained; but it is certain, that he afterwards introduced Laura into several pictures, as, for instance, those on the ceiling of the cathedral at Avignon. When Petrarch returned to Avignon, after having been crowned with laurel at the capitol, Laura, whether flattered by his fame, or touched by the constancy of a lover whom long absence had rendered more dear to her, received him kindly. Petrarch saw her more frequently, and his visits to Vaucluse became less frequent and long. His poems, which were spread over all Europe, made the beauty of his mistress very celebrated, and all strangers, who came to Avignon, wished to see Laura.

Charles of Luxemburg, afterwards the emperor Charles IV, saw her at a ball which was given him, and, beckoning to the other ladies to make way, he approached her, and kissed her on the forehead and eyes. But the repeated fatigues of maternity, and the domestic trouble which she suffered from the ill humor of her husband, and the bad conduct of her eldest daughter, made, at length such a change in her appearance, that those who saw her for the first time were disappointed. A pestilence which arose in the East, and spread desolation over Europe for three years, at length reached Avignon, in 1348, and, on the 6th April, at 6 o'clock in the morning, the hour which Petrarch has designated, in his mournful recollections, as that of the birth of his love, Laura fell a victim to this disease, and was buried on the same day, in the church of the convent of the Minorites. In 1533, some antiquaries obtained permission to open Laura's grave. They found a parchment enclosed in a leaden box, on which was written a sonnet, bearing Petrarch's signature. It was not, however, written in the spirit of that celebrated poet, but appeared to be the work of a friend. They also found a medal, bearing a female figure, with the inscription M. L. M. J. (perhaps, *Madonna Laura Morta Jace*). Francis I, who visited Avignon the same year, sought out Laura's grave, wrote an epitaph on her, and ordered a monument to be erected to her; but it was never done. The box and the medal were purchased (1730), of the under sacristan, by some Englishmen; but the sonnet was lost, when the castle, belonging to the family of Sade, was destroyed, in 1791. The tomb itself was overturned, together with the church, during the revolution. The prefect of Vaucluse (1804) caused the tomb-stone, which had been given to the family of Sade, to be placed in the old cathedral of Avignon. The abbé Costain has endeavored to prove, without any sufficient grounds, that Petrarch's Laura was descended from the family of Baux, and was the daughter of Adhemar de Baux. (See his *La Muse de Pétrarque dans les Collines de Vaucluse*, Paris and Avignon, 1819.) (See the article *Petrarch*.)

LAUREL (*laurus*); a genus of plants consisting of trees or shrubs, mostly aromatic, and often remarkable for the beauty of their foliage. The leaves are simple, generally alternate, and the flowers small and inconspicuous. It is one of the few genera belonging to the Linnæan class

enneandria. The species inhabit the tropical parts of the globe, and the warm regions in the vicinity; two of the American species, however, extend to a high northern latitude. Cinnamon, cassia and camphor are obtained from different species of *laurus*. The sweet bay (*L. nobilis*), so celebrated by the ancient poets, and used to decorate temples and the brows of victors, is a small ornamental evergreen tree, inhabiting the south of Europe and north of Africa. At the present time, the leaves and berries are chiefly employed for culinary purposes, and form an article of export, even to the U. States. The red bay (*L. Caroliniensis*) inhabits the alluvial district of the southern parts of the U. States, from latitude 37° to the gulf of Mexico, and is found westward beyond the mouths of the Mississippi. It is a beautiful tree, growing in the low grounds, in company with the cypress, and sometimes attains the height of 60 or 70 feet, with a trunk a foot or 18 inches in diameter. The leaves have an aroma very similar to that of the *L. nobilis*, and may be employed for the same purposes. The wood, which is strong, fine-grained, and capable of receiving a brilliant polish, was formerly employed, in the Southern States, in cabinet-making, and afforded very beautiful furniture; but the difficulty of finding stocks of sufficient size, together with the facility of procuring mahogany, has brought it into disuse. At present, it is chiefly employed in naval architecture, whenever it attains large dimensions. The wood is used also, in preference to any other, for tree-nails (wooden pins which fasten the planks of a ship to the timbers). The sassafras, so remarkable for having its leaves either simple, or divided into two or three lobes, is also a species of *laurus*. Though usually appearing as a shrub, it not unfrequently attains considerable dimensions, growing, in a rich soil, to the height of 40 or 50 feet, or even more, with a trunk of proportional diameter. It is common throughout the U. States, as far north as latitude 43°, and extends westward even into Mexico. The bark of the roots, which is the most powerfully aromatic part of the plant, has been in high repute as a medicine from the discovery of America, and is still exported to Europe in considerable quantities, but its virtues have been very much overrated, although it is yet frequently employed in pharmacy. A very agreeable beverage is made, in some parts of the U. States, of this bark, in combination with other substances, and it is also employed in dyeing,

affording a beautiful orange color. The *L. benzoin*, or fever-bush, is also an agreeably aromatic shrub, as widely extended throughout the U. States as the preceding. Four other species of *laurus* are found in the Southern States. Michaux strenuously recommends the introduction of the camphor tree (*L. camphora*) into the Southern States, and is of opinion, that it would soon become naturalized. The alligator pear, which forms a frequent article of nutriment in the West Indies, and is much cultivated for that purpose, is also the fruit of a species of *laurus*.

LAURENS, Henry, a distinguished statesman of the revolution, was born at Charleston, South Carolina, in 1724. His ancestors were French Protestant refugees, who had left France about the time of the revocation of the edict of Nantes. After receiving a good education, he was placed in the counting-house of a merchant of Charleston, but was soon afterwards sent to London to fit himself for commercial pursuits, under the eye of a gentleman who had been engaged in business in Charleston. On his return, he entered into business, and, by his industry and activity, acquired an ample fortune. Having retired from business, he went, in 1771, to Europe, in order to superintend the education of his sons, and was in London when he received the first accounts of the troubles which were beginning to agitate the colonies. With 33 other Americans, he endeavored, in 1774, by petition, to dissuade parliament from passing the Boston port bill, and exerted himself to prevent a war; but finding that nothing would be of any avail for that purpose, save dishonorable submission, he hastened home to take part with his countrymen. He arrived in Charleston in December, 1774, was chosen president of the council of safety, and soon manifested that he had lost none of his energy and habits of business. In 1776, he was elected a delegate to congress; soon after taking his seat, was made president of that body, and continued such until the close of the year 1778. He then resigned, and, in 1779, received the appointment of minister plenipotentiary from the U. States to Holland. On his way thither, he was captured by the British, carried to London, and committed to the Tower. For the first month of his confinement, he was permitted to walk out with an armed guard; but this indulgence was subsequently taken from him for a time, in consequence of lord George Gordon, then a prisoner also, having met and asked

him to walk with him, which, although Mr. Laurens refused to do, and immediately returned to his room, was interpreted into a transgression of orders. His confinement lasted for more than 14 months, during which, various efforts were made, by the British government, to shake his constancy, but without effect. Soon after his release, he received a commission from congress to be one of their ministers for negotiating a peace with Great Britain, and, having repaired to Paris, he signed, November 30, 1782, with doctor Franklin and John Jay, the preliminaries of the treaty. On his return home, he was received with every mark of esteem, but declined all offices. His health had been broken by his imprisonment, and, after passing the last years of his life in agricultural pursuits, he died December 8, 1792, nearly 70 years of age. According to an injunction contained in his will, his body was burnt, and his bones collected and buried.

LAURENS, John, lieutenant-colonel, son of the foregoing, after receiving a liberal education in England, returned to his country, and joined the American army in 1777. The following summary account of his military career is taken from Garden's interesting Anecdotes of the American Revolution. "His first essay in arms was at Brandywine. At the battle of Germantown, he exhibited prodigies of valor, in attempting to expel the enemy from Chew's house, and was severely wounded. He was engaged at Monmouth, and greatly increased his reputation at Rhode Island. At Coosahatchie, defending the pass with a handful of men, against the whole force of Provost, he was again wounded, and was probably indebted for his life to the gallantry of captain Wigg, who gave him his horse to carry him from the field, when incapable of moving, his own having been shot under him. He headed the light infantry, and was among the first to mount the British lines at Savannah; displayed the greatest activity and courage during the siege of Charleston; entered, with the forlorn hope, the British redoubt carried by storm at Yorktown, and received with his own hand the sword of the commander; by indefatigable activity, thwarted every effort of the British garrison in Charleston, confining them, for upwards of 12 months, to the narrow limits of the city and neck, except when, under the protection of their shipping, they indulged in distant predatory expeditions; and, unhappily, at the very close of the war, too carelessly ex-

posing himself in a trifling skirmish near Combahee, sealed his devotion to his country in death." It is related by judge Johnson, in his life of general Greene, that the greater part of the night, in which the fatal skirmish took place, was spent by Laurens in a jocund company of ladies; that the expected encounter was the subject of the gayest badinage; and that the company did not separate until two hours before the time when the colonel was in motion with his detachment. The sorrow at the news of his death was deep and universal. Washington, into whose family and affection he had won admission, mourned him as a lost son. Such a combination as was found in him of chivalrous gallantry, patriotism, ardor, elevation and rectitude of soul, with unaffected modesty, information, frankness, vivacity and polish of manners, has rarely been seen. He was the delight of every social circle, and the admiration of his companions in arms. There is one act of his life, which, perhaps, more than any other, entitles him to the gratitude of his country. In the autumn of 1780, he was sent, as a special minister, to France, in order to negotiate a loan from the French government, and, on his arrival in Paris, immediately entered upon the business of his mission; but, after a delay of more than two months, on the part of the government, to return a definitive answer to his application, he determined, contrary to all the rules of etiquette, to present a memorial himself to the king, at the levee. He first made the minister count de Vergennes, as well as doctor Franklin, the American envoy, aware of his intention, and, notwithstanding the urgent entreaties of the latter, carried it into effect. The king, however, received the memorial graciously, and matters were soon arranged in a satisfactory manner. The consequences of his successful boldness in this affair were all-important for the American cause, which would have been, perhaps, irretrievably ruined by any further procrastination. An account of the transaction, from the pen of the secretary of the mission, is to be found in the *American Quarterly Review*, vol. i, p. 425.

LAURISTON, James Alexander Bernard Law, count de, grandson of the celebrated projector Law, was born in 1768. He embraced the military profession at an early age, and served in the artillery, in which he obtained a rapid promotion, owing to his own activity, and to the friendship of general Bonaparte, whose aid-de-camp he was, and who employed him on several

important missions. He commanded, in 1800, in quality of brigadier-general, the fourth regiment of flying artillery, at La Fère. In 1801, he was chosen to convey to England the ratification of the preliminaries of peace, and was received with enthusiasm by the people of London, who took the horses from his carriage, and conducted him, in triumph, to Downing street. He served in every campaign of importance in Spain, Germany and Russia. In 1809, he penetrated into Hungary, and took the fortress of Raab, after a bombardment of eight days. July 6, he decided the victory in favor of the French at the battle of Wagram, by coming up to the charge, at full trot, with 100 pieces of artillery. In 1811, he was appointed ambassador to Petersburg. The object of his mission was to obtain the occupation of the ports of Riga and Revel, and to exclude English ships from the Baltic. This mission having failed, M. de Lauriston was employed in the Russian campaign, and, after the taking of Moscow, was sent with proposals for an armistice to the emperor Alexander, which were rejected. After the disastrous retreat from Moscow, he commanded the army of observation on the banks of the Elbe, and, during three months, defended that river with a small force, preventing the enemy from penetrating into Hanover. He fought with great valor at the battle of Leipsic, but, being taken prisoner, was conducted to Berlin, where he was treated with favor and distinction. After the conclusion of the general peace, Louis XVIII created him a knight of St. Louis, grand cordon of the legion of honor, and captain-lieutenant of the Gray Musketeers. After March 20, 1815, he followed the king's household to the frontiers of France, and then retired to his estate of Richécourt, near La Fère, without mingling in any of the transactions of the hundred days. On the return of Louis, he was nominated president of the electoral college of the department of L'Aisne, lieutenant-general of the first division of royal foot-guards, and member of the commission appointed to examine into the conduct of such officers as had served from March 20 to July 8, 1815. He was created a commander of St. Louis in 1816, and presided, in the course of the same year, at the trial of admiral Linois, count Delaborde, &c. In 1823, he was appointed marshal, and commanded the second *corps de réserve* of the army in Spain. He died in 1828.

LAUSANNE, capital of the Pays-de-

Vaud, a Swiss canton, has 1300 houses, with 10,000 inhabitants; lon. 6° 45' 30" E.; lat. 46° 31' 45" N. It is most beautifully situated about a mile from the lake of Geneva. Lausanne lies high, with the lake and snowy Piedmontese Alps in front, whilst the shore of the lake is covered with vineyards. Since 1536, there has been an academy at Lausanne, which, in 1806, was elevated to an academical institute, with 14 professors and a rector. It has works in gold and silver, printing-offices, and some trade in wine; but its chief profits are derived from the numerous foreigners who resort to it from all countries on account of its charming situation, or to perfect themselves in French. Lausanne has a *société d'émulation*, societies for natural history and agriculture, and a Bible society. Formerly the city belonged to Berne, whose bailiff lived in the episcopal palace. The bishop transferred his residence to Freiburg, when Lausanne embraced the Calvinistic religion. Haller, Voltaire and Gibbon resided here for a considerable period.

LAUSITZ. (See *Lusatia*.)

LAUTER. (See *Kaiserslautern*.)

LAVA. (See *Volcanoes*.)

LVALETTE; the name of several individuals distinguished in French history, of whom we shall mention only two, the subject of this article and that of the following.—Jean Parisot de Lavalette, the 48th grand-master of the knights of Malta, was born in 1494, of an ancient family. Lavalette, unanimously elected grand-master in 1557, showed himself equally active and wise as head of his order and as a general. His ambassadors were admitted, at the council of Trent, among those of the most powerful monarchs. He restored the internal organization of his order, but distinguished himself particularly by the heroic defence of Malta against Soliman II, who attacked it with a force of 80,000 men, and whom he forced, after a siege of several months, to retire, in 1565, with a loss of more than 20,000 men. He then built the fortress La Valetta in Malta, refused the cardinal's hat, and died in 1568. (See *Malta*.)

LVALETTE, Marie Chamans, count de, was born at Paris, in 1769, of obscure parents. His mother was a nurse, often employed by the famous accoucheur Baudelocque, who, perceiving the promising talents of the youth, furnished her with the means of giving him an education far superior to his birth. Young Lavalette was destined for the clerical profession, and wore the habit of an abbé for some

time, but afterwards took to the study of the law. The revolution, in 1789, gave another direction to his ambition. He became an officer in the national guards, and in August, 1792, defended the Tuileries. He afterwards served in the army of the Rhine and that of Italy, with such distinction, that he rose rapidly. Bonaparte made him his aid-de-camp, intrusted him with his secret correspondence, and gave him in marriage Mlle. Beaubarnais, the niece of Joséphine. He accompanied Bonaparte to Egypt, and, soon after the establishment of the consular government, was made count, and a commander of the legion of honor. In 1814, he was removed from the post-office; but when Louis quitted Paris, in 1815, he repaired to the office, in company with general Sebastiani, and summoned his successor, M. Ferrand, to surrender his place, only allowing him a few minutes to collect his papers, but, at the same time, treating him with great politeness. He then took measures to accelerate the progress of Napoleon, and conducted himself with extraordinary vigilance and activity. For these services he was created a peer of France (June 2), and continued in his office till the return of the king. In the month of November following, he was brought to trial, and condemned to death as an accomplice of Napoleon. His appeal and application for pardon having failed, preparations for his execution on Thursday, December 21, were making, when his wife, having obtained permission to visit him, came, on the 20th, in a sedan chair, and dined with him, attended by her daughter and the governess. About seven in the evening, the two latter appeared at the keeper's lodge, apparently supporting Madame Lavalette, who was closely muffled up, held a handkerchief before her eyes, and exhibited every symptom of the profoundest distress. After a few minutes, the keeper of the prison repaired to Lavalette's apartment, where he found Madame Lavalette in his place. He set his turnkeys and keepers in motion, but, in spite of their activity, nothing was found but the sedan chair, in which the young daughter had taken the place of her father, who had suddenly disappeared at the *Quai des Orfèvres*. The jailer was then removed and confined, the barriers were closed, and expresses were sent in every direction, with the description of Lavalette's person, who contrived to lie closely concealed for a fortnight, in spite of the vigilance of the police, during which time he meditated on the most effectual method of

completing his escape. He had recourse, for that purpose, to three Englishmen—Messrs. Bruce and Hutchinson, and sir Robert Wilson, who were already known for their zeal in support of the principles of liberty, and for their hostility to the tyranny exercised by the Bourbons. By means of these gentlemen, he procured the uniform of a general officer in the British service, and repaired, January 7, at half past nine at night, to the apartments of captain Hutchinson. The next morning, at seven o'clock, he got into a cabriolet with sir Robert Wilson, passed the barriers without being recognised, and arrived the following day at Mons, where his guide took leave of him. He then took the road to Munich, where he found an asylum among powerful friends and connexions. Irritated by his escape, the government had the cruelty to retain his wife for some time in prison, because she had been accessory to the escape of her husband—a treatment which disordered her senses, and she has since been a confirmed lunatic. Lavalette was pardoned, and returned to France in 1821.

LAVATER, John Gaspar, was born in 1741, at Zurich, in Switzerland, where his father enjoyed the reputation of a skilful physician and good citizen. The severity of his mother somewhat depressed the mind of the boy, who was endowed with a lively imagination, and he early gave himself up to solitary reveries. While yet at school, he was persuaded that he had received direct answers to his prayers. His imagination, even at that early period, appears to have been so actively employed, that he never acquired much knowledge of philology or classical antiquity. In 1763, he travelled, in company with Fuseli—afterwards a distinguished painter in London—to Leipsic and Berlin, and became acquainted with the scholars and theologians of Northern Germany. In 1764, he returned to his native city, and, in 1767, appeared as a poet in his *Schweizerlieder*, which, as well as his *Aussichten in die Ewigkeit* (1768), gained him many admirers. In 1769, he was appointed one of the ministers at the orphan church at Zurich. His sermons were rendered attractive by their pleasing style, his enthusiastic zeal, and a certain mysticism which always characterized him. They were printed in 1772, and were admired even in foreign countries. All his activity was, in fact, devoted to the service of religion, until he undertook his work on physiognomy. Lavater had become acquainted with a great number of

persons, and his lively imagination had led him to the conclusion that there exists a much greater connexion between the internal man and the external expression in the face than is generally supposed. He reduced this external expression of disposition and character to a system, and considered the lines of the countenance as sure indications of the temper. He had adopted this idea in 1769, and collected the features of distinguished people from all parts of the world. His great work (in four volumes, 4to.), under the modest title *Physiognomical Fragments* (1775 et seq.), made him known all over Europe. It was rendered valuable by the numerous portraits it contains, mostly well executed by some of the first engravers of Germany. Lavater had added explanations, in a poetical style, full of enthusiastic exclamations. As may easily be imagined, a theory so novel found warm admirers, whose zeal often rendered it ridiculous, and Lichtenberg satirized it in his *Essay on Cues and Tails*—one of his most successful compositions. Lichtenberg's exclamations on the contour of a pig's tail, or a happily-adjusted cue, equal the raptures of Lavater viewing the physiognomy of an Alexander. According to Las Cases, Napoleon declared himself convinced, by long experience, that no reliance was to be placed on the expression of the face—an opinion which is perhaps true to a greater extent in respect to talents than disposition. Lavater himself seems to have given up his theory in a great degree. (See *Physiognomy*.) He published several other works, including poems and works of religious instruction, and his reputation became so great, that his journeys resembled triumphs. He refused better appointments in foreign countries, and became minister at St. Peter's church in Zurich. During the revolution, he spoke with boldness against the new order of things, the Swiss directory, &c., and was finally transported to Bâle, in 1796. He was again set at liberty, but, on the capture of Zurich (Sept. 26, 1799), by Massena, while occupied in the street, assisting the distressed, and giving refreshment to exhausted soldiers, he received a shot in his side.* He lingered above a year, during which he wrote several

* According to Raoul-Rochette's *Histoire de la Révol. Helvétique* (Paris, 1822), neither a Russian nor a Frenchman was his murderer: "Le crime appartient tout entier à la fureur des partis; et Lavater qui connaissait son assassin, emporta dans la tombe cet horrible secret avec tous les autres secrets de sa belle âme et de son inépuisable charité."

works, and died January 2, 1801. Lavater was one of the most virtuous of men, so that a biographer says of him, "Had he lived in early times, he would now be adored as a saint, because every thing which the church requires from a saint he had in perfection—charity, love of mankind, and unrelaxing zeal in the cause of Christ." He did much for practical theology. Lavater owed little to learning, but drew chiefly from himself. His work on *Physiognomy* has been several times translated into English. Of the English translations, we may mention Hunter's (Lond., 1789, 5 vols. 4to.) A valuable French edition appeared in 1809 (Paris, 10 vols.).

LAVENDER; a delightfully fragrant plant, native of the south of Europe, and now commonly cultivated in our gardens. All the labiate plants are aromatic and stimulating, but these properties are more exalted in this plant than in any other of the tribe, especially when it grows in a warm and sunny exposure. Indeed, in such situations, it sometimes contains one fourth of its weight of camphor. To the abundance of this plant is attributed the superiority of the honey in certain parts of Europe. The volatile oil, distilled water, and tincture of lavender, are much employed in officinal preparations, and as perfumes. The flowers yield by far the greatest proportion of oil.

LAVINIA; a daughter of king Latinus and Amata. She was betrothed to her relation, king Turnus, but, because the oracle ordered her father to marry her to a foreign prince, she was given to Æneas, after the death of Turnus. (See *Latinus*.) At her husband's death, she was left pregnant, and, being fearful of the tyranny of Ascanius, her son-in-law, she fled into the woods, where she brought forth a son, called *Æneas Sylvius*.

LAVINIUM, or **LAVINUM**; a town of Italy, said to have been built by Æneas, and called in honor of Lavinia, the founder's wife. It was the capital of Latium during the reign of Æneas.

LAVOISIER, Anthony Lawrence, a celebrated French chemist, whose name is connected with the antiphlogistic theory of chemistry, to the reception of which he contributed by his writings and discoveries. He was born at Paris, August 16, 1743, and was the son of opulent parents, who gave him a good education. He acquired an intimate knowledge of the physical sciences, and first distinguished himself by a prize memoir on the best method of lighting the streets. Two years after, in 1768, he was chosen a member of the

academy. About this time, he published several tracts, in periodical works, on the analysis of gypsum, the crystallization of salt, the congelation of water, on thunder, the aurora borealis, &c. Journeys to different parts of France furnished him materials for a mineralogical chart of the kingdom, intended as the basis of a work on the revolutions of the globe, and the formation of the strata of the earth, outlines of which appeared in the memoirs of the academy for 1772 and 1787. The discoveries of Black, Cavendish, Macbride and Priestley, relative to the nature of elastic fluids or gases, attracted the notice of Lavoisier, who entered on the same field of inquiry, with all his characteristic ardor in the cause of science; and, possessing the advantage of a considerable fortune, he conducted his experiments on a large scale, and obtained highly interesting results. In 1774 appeared his *Opuscules chimiques*, comprising a general view of what was then known relative to gaseous bodies, with several new experiments, remarkable for their ingenuity and accuracy. Doctor Priestley's discovery of what he called *dephlogisticated air*, afterwards generally termed *oxygen gas*, furnished Lavoisier with a fresh subject of research; and, in 1778, he published an essay on this substance, and its influence in the production of acids, developing the principle of a new chemical theory. This was further illustrated by his experiments on the composition of water, by burning together the oxygen and hydrogen (q. v.) gases, and by its analysis affording the same principles; and the system was completed by his theories of combustion (q. v.) and oxidation (see *Oxygen*), the decomposition of atmospheric air, his doctrine of caloric (q. v.), and its influence in causing the solid, liquid and gaseous states of bodies; and the whole theory was laid before the public in his *Elements of Chemistry*, which appeared in 1789, and was speedily translated into English and other languages. (See *Chemistry*, and *Chemical Nomenclature*.) M. Lavoisier rendered many services to the arts and sciences, both in a public and private capacity. When the new system of weights and measures was brought forward, he contributed to its improvement by some novel experiments on the expansion of metals. He was consulted by the national convention as to the best method of manufacturing assignats, and securing them from being forged. In 1791, the committee of the constituent assembly applied to him for information preparatory

to the adoption of an improved system of taxation, in consequence of which he drew up a work, which was published under the title of *Richesses territoriales de la France*, relating to the production and consumption of the country. About this time, he was appointed one of the commissioners of the national treasury—an office which afforded him an opportunity of exercising his spirit of systematic arrangement. His house became a vast laboratory; the most skilful artists were employed to construct the necessary instruments and apparatus for his philosophical researches. He had *conversazioni* at his house twice a week, at which were discussed the theories, opinions and discoveries of learned contemporaries. With other farmers-general, he was condemned to death by the revolutionary tribunal of Paris, on the charge of being a conspirator, and of having adulterated the tobacco with ingredients obnoxious to the health of the citizens, and, on this frivolous pretext, was beheaded by the guillotine, May 8, 1794. When he found his fate inevitable, he petitioned for a few days' respite, in order to make some interesting and important experiments which he had in view; but this favor was denied him. M. Lavoisier married, in 1771, the daughter of a farmer-general, a lady of agreeable manners and considerable talents, who not only participated in her husband's philosophical researches, but also cultivated the arts with great success, and engraved with her own hand the plates for one of his publications. She subsequently became the wife of count Rumford.

LAVORA, or TERRA DI LAVORO; a principality of Naples, bounded north by Abruzzo Ultra and Abruzzo Citra, east by Molise and Principato Ultra, south by Principato Ultra and the gulf of Naples, and west by the Mediterranean and the Campagna di Roma; about 140 miles in length, and 33 wide where broadest. It is populous and fertile, yielding abundance of corn, wine, oil, and other productions of Italy. Anciently it was called *Campania*; in the middle ages, the *Castellany of Capua*. Caserta is the capital; Gaeta the principal port. Pop., 625,500; sq. miles, 1696.

LAW. (See *Appendix* to this volume.)

Law Merchant. (See *Commercial Law*.)

Law of Exception (in French, *loi d'exception*). When the situation of a state is so critical that the ordinary powers and laws are no longer considered sufficient, extraordinary and more energetic means are employed. The Romans had a form for such an emergency, which in-

vested the two consuls with a greatly augmented power—" *Videant consules, ne quid respublica detrimenti capiat* (Let the consuls see that the republic receive no injury);" and if this was not sufficient, they appointed a dictator. The remedy was often worse than the disease. Despotical governments require no laws of exception; in these the public power is always free from the restraints which are imposed upon it in constitutional states. In the latter, certain cases happen in which the power of the government must be strengthened, to be able to act with energy and promptness. In England, the first and most important regulation, in such an emergency, is the suspension of the *habeas corpus* act for a limited time. The government can then take into custody suspected and dangerous persons, without following the regular process of law. This suspension is not a prerogative of the crown, but can only be granted by parliament, and for a limited period, at the expiration of which all such state prisoners must be released, or subjected to a formal examination. Even then, the suspension does not protect the ministerial officers against the demands for indemnification for an unjustifiable arrest. These complaints, when made against the ministers of the king, are usually comprehended in a separate act of parliament, called the *indemnity bill*, at the discussion of which in parliament, the opposition party is careful to institute a strict examination of the use which the ministers have made of their extraordinary power. A second regulation of this kind is the alien bill (see *Alien Bill*), which invests the government with a power over all foreigners dwelling in England, such as does not constitutionally belong to it, giving the right not only to order them out of the country at pleasure, but also to send them to any part of the continent. Bills of pains and penalties, which are admissible in single cases, constitute a sort of law of exception. Parliament maintains the right to pass such bills, which could not belong to it under a correct division of public power, and thus to punish individuals without a judicial sentence. This is to be distinguished from its proper judicial functions, by which the peers of the realm, the house of lords, act as the highest court of justice, and the house of commons comes forward as complainant (as in the case of governor Hastings). There the lords sit formally as a court of justice; a full judicial hearing is granted to the defendant, and his condemnation cannot be pronounced except by a

majority of 12 voices (the number of the jury in usual cases). In these cases, the house of lords alone decides upon the motion of the commons, and wholly without the concurrence of the king, whose right to pardon is even circumscribed. But when an individual bill of attainder, or bill of penalties, is brought forward in parliament, then the introduction of the act may take place in the house of lords as well as in the house of commons; and no peculiar legal process is followed, but it depends on the pleasure of each house how the facts, upon which the summary sentence is grounded, shall be proved; and it is only from considerations of natural justice that opportunity is granted to the accused to defend himself. The sentence itself is passed by a simple majority of voices in each house, like other laws; but it must be sanctioned by both houses of parliament, and the assent of the king must be obtained, as in any other law. In fixing the punishment, also, parliament is amenable to no established rule, and the right of the king to pardon wholly ceases, if he has once given his consent. Such a process has always something very odious on the face of it, and, in point of fact, it is very rarely resorted to. Thomas Wentworth, earl of Stafford, the celebrated confidential minister of Charles I, was condemned to death by this form, and it was equally criminal and impolitic in the king to give his consent to this bill of attainder. The same process was introduced against the queen, in 1820, and, wholly independent of her guilt or innocence, this was a sufficient reason for rejecting it. In the U. States, no such legislative power exists, either in the state or in the national legislature. It is contrary to the genius of a republican government. The constitution of the U. States declares, that "No bill of attainder, or *ex post facto* law, shall be passed;" that "the privilege of the writ of *habeas corpus* shall not be suspended unless when, in cases of rebellion or invasion, the public safety requires it." So, also, except in cases of impeachment, every person accused of a capital or infamous crime (except in the navy or army service) has a right to a trial by jury, and cannot even then be tried, unless upon a presentment or indictment by a grand jury. Such are the privileges guaranteed by the constitution of the U. States. And the state constitutions generally embrace the same protective principles. There is also another principle recognised in the constitution of the U. States, which is of great importance. It is the provision, that

“excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted;” so that, while the present republican constitutions of government exist in America, there can be no such thing as a dictatorship, or a law of exception. In France, there was no occasion for laws of exception before 1790; the *lettres de cachet* (q. v.) answered all purposes. The parliaments, if they opposed the royal mandates, and prevented their publication, which consisted in entering them in the register of parliament, were at last brought to obedience by a royal session, or *lit de justice*, or by exile to some obscure place; or, if their resistance was obstinate, they were dissolved, as in the last years of Louis XV. But after the struggle for legal order, from want of moderation on both sides, had degenerated into a furious conflict of parties, the laws of exception were often really necessary, though often used merely as instruments of faction. We do not here refer to illegal, though perhaps necessary, measures (*coups d'état*) adopted in extraordinary cases, such as the dissolution of the legislative body on the 18th Fructidor, 1797, the abolition of the tribunate, 1807, &c. But the suspension of the constitution (even the democratical), by the committee of public safety, in 1793, and the rendering the revolutionary tribunal permanent, were genuine laws of exception. The regular administration of the laws was promised by every new government, but, down to the revolution of 1830, the promise was not fulfilled. The liberty of the press was repeatedly restrained, and the regular course of justice perverted by special tribunals. One of the most remarkable laws of exception was that of March 3, 1810, respecting the state-prisoners, by which the ancient *lettres de cachet* were again introduced in almost full force. It was required, indeed, that a warrant of the minister of justice, and a mandate of the privy council, should precede imprisonment, which was to continue no longer than a year; but a regulation, like the *habeas corpus* act in England, was wanting to enforce the performance of these conditions. Under the reign of Louis XVIII, also, numerous laws of exception were enacted, although the charter (art. 8th) declared, “The French have the right of publishing and printing their opinions, provided they conform to the laws against the abuses of the press.” By repeated laws of exception, the censorship was extended not only over the political, but often even over the literary,

journals. The assassination of the duke of Berry, in particular, was made the pretence for restricting the liberty of the press, for investing the ministers with authority to confine persons suspected of crimes, or of criminal designs against the king, the state, and the royal family, without a judicial process. These laws were to continue to the end of the session of 1820. The law concerning the censorship was renewed in the session of 1820, and till three months after the commencement of the session of 1821; but the law relating to the imprisonment of suspected persons was tacitly abolished. The last laws of exception in France were the famous ordinances of July, 1830, which resulted in the overthrow and expulsion of the Bourbons.

Law of Nature, and of Nations. (See *National Law, and Natural Law.*)

LAW, EDWARD, lord Ellenborough. (See *Ellenborough.*)

LAW, JOHN; a celebrated financial projector, the son of a goldsmith of Edinburgh, in which city he was born in 1681. He was bred to no profession, but became versed in accounts, and was employed in those of the revenue. For the purpose of remedying the deficiency of a circulating medium, he projected the establishment of a bank, with paper issues, to the amount of the value of all the lands in the kingdom; but this scheme was rejected. In consequence of a duel, he fled from his country, and visited Venice and Genoa, from which cities he was banished, as a designing adventurer, but, at length, secured the patronage of the regent duke of Orleans, and established his bank in 1716, by royal authority. It was at first composed of 1200 shares of 3000 livres each, which soon bore a premium. This bank became the office for all public receipts, and there was annexed to it a Mississippi company, which had grants of land in Louisiana, and was expected to realize immense sums by planting and commerce. In 1718, it was declared a royal bank, and the shares rose to twenty times their original value. In 1720, Law was made comptroller-general of the finances; but the shares sunk in value as rapidly as they had risen. He was obliged to resign his post, after he had held it only five months, and to retire, first to a seat in the country, and then, for personal safety, to quit the kingdom. He carried with him a small portion only of the vast fortune he at one time possessed, and lived afterwards in great obscurity. After visiting England, Holland, Germany, and other countries,

he finally settled at Venice, where he died in 1729, still occupied in vast schemes, and fully convinced of the solidity of his system, the failure of which he attributed entirely to enmity and panic. Various opinions have been entertained of the merit of his project; and by some it has been thought to have possessed feasibility, had it been carried more moderately into practice.

LAW, William; a divine of the church of England, born at Kingcliffe, in Northamptonshire, in 1686, educated at Emanuel college, Cambridge, where he was elected fellow. On the accession of George I, refusing to take the oaths, he vacated his fellowship, and left the university. He then officiated as a curate in London, and as tutor to Edward Gibbon, father of the historian. Mrs. Hester Gibbon, aunt of the same eminent individual, and Mrs. Elizabeth Hutchinson, formed a joint establishment, of which he became a member, at his native village of Kingcliffe, where he died in 1761. The writings of Mr. Law, although in many respects excellent, partake of a gloominess and severity, tinged with a mysticism and enthusiasm, that the study of the writings of Jacob Böhme did not fail to increase. The *Serious Call to a Devout and Holy Life*, is deemed, both by doctor Johnson and Mr. Gibbon, one of the most powerful works of devotion in the English language, as is also his *Practical Treatise on Christianity*, which abounds with satire, spirit, and knowledge of life. He also wrote some other works, and published translations of his favorite Böhme. (See his *Life*, by Tighe, and Gibbon's *Memoirs* of himself.)

LAWRENCE, sir Thomas, a distinguished English portrait painter, was born at Bristol, in 1769. His father was an inn-keeper, and the artist very early exhibited proofs of his talent for the art: he is said to have sketched portraits very successfully in his fifth year. At the age of six, he was sent to school, where he remained two years; and this, with the exception of a few lessons subsequently, in Latin and French, constituted his whole education. His father would not even permit him to be instructed in drawing, declaring that his genius would be cramped by the restraint of rules. Young Lawrence, however, had access to the galleries of some of the neighboring gentry, in which he employed himself in copying historical and other pieces. In 1782, his father removed to Bath, where his son was much employed in taking portraits in crayon; and, having made a copy of the Transfiguration, by Raphael, the society of arts bestowed on

him their silver palette, in consequence of its merits. During six years, he was the sole support of his father and a large family. In 1787, the family removed to London, and Lawrence was admitted a student at the royal academy. His subsequent career was successful and brilliant. He was elected royal associate in 1791, and, on the death of sir J. Reynolds, the next year, was made painter to the king. His reputation grew steadily, and he was soon considered the first portrait painter of the age in England. His scene from the *Tempest* was a successful attempt at historical painting; but that branch of the art receives too little encouragement in England, in comparison with that of portrait painting, to induce a successful artist, in the latter department, to cultivate the former. In 1815, he was knighted by the prince regent, who also employed him to take the likenesses of the sovereigns, and the most distinguished persons of their suite. During their visit to England, he finished the portrait of the king of Prussia, and went to Aix-la-Chapelle, several years afterwards, to paint Alexander; thence he went to Vienna, where he completed the portraits of the emperor, the archdukes, Metternich, &c., and, in Rome, painted Pius VII and cardinal Gonsalvi. On his return to England, he was elected president of the royal academy, as successor to West. (q. v.) This office he held till his death, which occurred suddenly, Jan. 7, 1830. His portraits are striking likenesses, and display a bold and free pencil; but they are, particularly his later ones, chargeable with mannerism, and are not considered to be successful in expressing the nicer shades of character. In his drawing, there is a want of accuracy and finish. His income, for the last twenty years of his life, was from £10,000 to £20,000; but he died poor, owing to his zeal to possess the first-rate productions of his art, which he purchased at any price. The personal appearance of sir Thomas Lawrence was striking and agreeable. His countenance bore a marked resemblance to that of Canning, and he was always pleased when this resemblance was observed. He was studious in dress, and went beyond the limits of correct taste in this particular. A look of settled melancholy was always upon his features, and there was a restlessness in his manner that bespoke an inquiet spirit.

LAWRENCE, James, a distinguished American naval commander, was born at Burlington, New Jersey, in 1781. He early manifested a strong predilection for

the sea; but his father, who was a lawyer, was anxious that he should pursue his own profession; and, when only 13 years of age, he commenced the study of the law; but after the death of his father, he entered the navy as a midshipman, in 1798. In 1801, the Tripoli war having commenced, he was promoted, and, in 1803, was sent out to the Mediterranean, as the first lieutenant of the schooner *Enterprise*. While there, he performed a conspicuous part in the destruction of the frigate *Philadelphia*, which had been captured by the Tripolitans. In the same year, he was invested with the temporary command of the *Enterprise*, during the bombardment of Tripoli by commodore Preble, all the ships of the squadron being employed to cover the boats during the attack; and so well did he execute his duty, that the commodore could not restrain the expression of his thanks. He remained in the Mediterranean three years, and then returned with Preble to the U. States, having previously been transferred to the frigate *John Adams*, as first lieutenant. In June, 1812, war was declared between Great Britain and the U. States, and Lawrence, at the time in command of the *Hornet*, a few days afterwards sailed with a squadron under the orders of commodore Rogers, for the purpose of intercepting the Jamaica fleet. They returned, however, at the end of the following month, to Boston, without having been able to accomplish their object. Lawrence then accompanied commodore Bainbridge on a cruise to the East Indies; but they separated near St. Salvador, on the coast of Brazil, the *Hornet* remaining there to blockade a British ship of war, laden with specie, till compelled to retire by the arrival of a seventy-four. Feb. 24, 1813, the *Hornet* fell in with the brig *Peacock*, captain Peake, which she took after a furious action of 15 minutes. This vessel was deemed one of the finest of her class in the British navy. In the number of her men and guns, she was somewhat inferior to the *Hornet*. She sunk before all the prisoners could be removed. The latter was considerably damaged in the rigging and sails, but her hull was scarcely hurt. Lawrence returned to the U. States, where he was welcomed with the applause due to his conduct; but the most honorable eulogy bestowed upon it, was contained in a letter, published by the officers of the *Peacock*, expressing their gratitude for the consideration and kindness with which they had been treated. Shortly after his return, he was ordered

to repair to Boston, and take command of the frigate *Chesapeake*. This he did with great regret, as the *Chesapeake* was one of the worst ships in the navy. He had been but a short time at Boston, when the British frigate *Shannon*, captain Brooke, appeared before the harbor, and defied the *Chesapeake* to combat. Lawrence did not refuse the challenge, although his ship was far from being in a condition for action; and, June 1, 1813, he sailed out of the harbor, and engaged his opponent. After the ships had exchanged several broadsides, and Lawrence had been wounded in the leg, he called his boarders, when he received a musketball in his body. At the same time, the enemy boarded, and, after a desperate resistance, succeeded in taking possession of the ship. Almost all the officers of the *Chesapeake* were either killed or wounded. The last exclamation of Lawrence, as they were carrying him below, after the fatal wound, was, "Don't give up the ship." He lingered for four days in intense pain, and expired on the 5th of June. He was buried at Halifax, with every mark of honor.

LAWRENCE, ST.; a Roman deacon, and martyr, who, when his bishop, Sixtus, was led to death, cried out, "Whither dost thou go, father, without thy son?" The bishop ordered him to remain, and to take care of the treasures of the church; but he was arrested, and ordered to give up these treasures. He asked for three days' respite, during which he called together all the poor and sick, whom he showed to the satellites of the emperor, as those whose support secured treasure in heaven. The instrument of his martyrdom was a gridiron, on which he was burned to death, in 254. (See *Escurial*.) His day, in the Catholic church, is August 10.

LAWRENCE, ST. This river, one of the largest in the world, is the outlet by which the waters of the great lakes Superior, Huron, Michigan, Erie and Ontario are poured into the ocean through the gulf of St. Lawrence. In different parts of its course, it is known by different names. From the sea to lake Ontario, it is called *St. Lawrence*; but the name *Catawaqui*, or *Iroquois*, is sometimes applied to the part between Montreal and lake Ontario. Between lakes Ontario and Erie, it is called *Niagara* river; between lakes Erie and St. Clair, *Detroit* river; between lakes St. Clair and Huron, *St. Clair's* river; between lakes Huron and Superior, *St. Mary's* river, or the *Narrows*, forming thus an uninterrupted connexion of up-

wards of 2000 miles. It is navigable for ships of the line to Quebec, about 400 miles, and to Montreal for ships of 600 tons, 580 miles. The distance from Montreal to lake Ontario is 190 or 200 miles. The tide flows up as far as Three Rivers. Its breadth between Montreal and Quebec is from half a mile to four miles; the average breadth, about two miles. Below Quebec, it gradually widens, till it enters the gulf, where, from cape Rosier to the Mingan settlement, on the Labrador coast, it is about 105 miles in breadth. The country through which it flows, from the lake to the gulf, is generally fertile, and much of it well cultivated, and rapidly improving; on both sides, the prospect is delightful: numerous villages, for the most part built round a handsome stone church, invite the traveller's attention, while single houses and farms appear at agreeable distances. The river in several places spreads out into large lakes, as lake St. Francis, St. Louis, and Deux Montagnes; and there are numerous islands, shoals and rapids. From the beginning of December to the middle of April, the navigation is totally suspended by frost. The breaking up of the ice in the spring is described as a magnificent scene.

LAWRENCE, St., GULF OF; a gulf which receives the waters of the St. Lawrence, formed between the western part of Newfoundland, the eastern shores of Labrador, the eastern extremity of New Brunswick, part of Nova Scotia, and the island of Cape Breton. It communicates with the Atlantic by three passages,—on the north, by the straits of Belleisle, between Labrador and Newfoundland; on the south-east, by the passage between cape Ray and Newfoundland; and by the gut of Canso, which divides Cape Breton from Nova Scotia. The distance from cape Rosier to cape Ray is 79 leagues; from Nova Scotia to Labrador, 106.

LAY (from the Anglo-Saxon word *ley*); the name of an ancient elegiac kind of French lyric poetry, formerly much imitated by the English. The *lay* is said to have been formed on the model of the trochaic verses of the Greek and Latin tragedies. There were two sorts of *lays*; the greater, which consisted of 12 couplets of verses, in different measures; and the lesser, comprising 16 or 20 verses. The word *lay* is now generally applied to any little melancholy song or air, and is, for the most part, used in that sense by Chaucer, Spenser, Milton, Waller, Dryden, and other classical English poets.

LAYBACH (in Italian, *Lubianna*; in Illy-

ian, *Lublana*); capital of the Austrian duchy of Carniola, the seat of the chief imperial *gubernium*, in the kingdom of Illyria, for Carniola and Carinthia, also of a prince-bishop, &c. In ancient times, it was called *Emona*, and was a considerable city in the Vindelician Illyria. It contains, at present, 866 houses, with 11,500 inhabitants, who speak German, Italian, modern Greek, and French. The lower class speak the Illyrian-Vindelician dialect, which differs little from the Croatian and Istrian. It carries on considerable commerce with Vienna, Venice, Bavaria, Constantinople. From 1809 to 1813, it was the residence of the French governor-general of the Illyrian provinces. The city has become remarkable, of late, on account of the congress holden here, from January 26, 1821, to May of the same year. In the article *Congress*, the recent congressional politics, and the consequences of the congress at Laybach, are discussed. This congress forms a conspicuous epoch in the history of politics, as it was here that the right of armed intervention (see *Intervention*) was regularly proclaimed and received into the national law of Europe. Russia, Austria and Prussia declared that they would never abandon these principles, but the year 1830 made some change in their policy. England declared (Castlereagh's letter, January 19, 1821) that it could not agree to such principles.—See Bigon's *Du Congres de Troppau* (Paris, 1821), and the articles *Italy*, *Sicilies*, *The Two*, and *Sardinia*; see also the article *France*, *History of*.

LAYMAN (from the Greek *laos*, people) signifies, since the third century, every person not a clergyman.—Among painters, it signifies a small statue, whose joints are so formed, that it may be put into any attitude, for the purpose of adjusting the drapery of figures.

LAYNEZ, James, the second general of the Jesuits (q. v.), and the real founder of the policy and organization of the society, was born at Almaraz, near Sigüenza, in Castile, in 1512. He studied at Alcalá. The fame of Ignatius Loyola's religious zeal, and the desire of becoming acquainted with him, and, at the same time, of pursuing his own studies, led Laynez to Paris, where Loyola was then residing, in order to escape the persecution of the inquisition. An intimacy was soon formed between these two zealots, and they determined to go to Turkey, and preach the gospel to the infidels. A war with the Porte defeated this plan; and, while at

Venice, in 1536, they formed the project of establishing a society, the principal aim of which should be the education of the people in the doctrines of the Roman church, and the prevention of the spread of the new opinions. Laynez, more prudent, learned, refined and dexterous than Loyola, had the principal share in the formation of this plan, and his disinterestedness, his zeal and activity, were the principal causes of the success of the new institution. After the order had been confirmed by Paul III (1540), and Loyola, at the request of Laynez, had been appointed the first general, he made many journeys for the purpose of extending the society of the Jesuits, and exerted himself, with great activity, in the cause of the pope at the council of Trent. He refused the cardinal's hat, which was offered him by Paul IV. In 1558, he succeeded Loyola, as general of the order. In 1561, he went to France with the cardinal Ferrara, to assist him in extirpating heresy. Still we must do him the justice to say, that he was the only one at the notorious conference of Poissy, who listened at all to the voice of reason and mercy. The establishment of the Jesuits in France, although with some restrictions (see *Jesuit*), was the result of this journey. After Laynez had assisted in establishing, at the third council of Trent, the supremacy of the bishop of Rome over the other bishops, he returned to Rome, where he devoted himself to the direction and extension of his order. He died there January 19, 1565, at the age of 53.

LAZARETTO ; a public building, hospital or pest-house, for the reception of those afflicted with contagious distempers. It is more particularly applied to buildings in which quarantine is performed. (See *Quarantine, Plague, Yellow Fever*.)

LAZARITES, or FATHERS OF ST. LAZARUS, in France ; the priests of the mission were so called after their priory of St. Lazarus, in Paris. This order, consisting of regular priests, bound by complete monastic vows, was established in 1634, for the purpose of supporting missions ; but, in pagan countries, they have effected less than other orders established for the same purpose. In China, they have still a mission. In France, they survived the revolution, and, in 1816, were restored, by a royal ordinance, to their original destination, on account of their services in the care of the country people. Before July, 1830, they distinguished themselves as the most active missionaries, adherents, and informers, in the service of the ultra-party ;

by means of which party, a portion of their former estates was restored to them. In Poland, where they are called *fathers of the mission*, they are most numerous, and have great influence, as teachers in the seminaries and as spiritual censors. They maintain their ancient monasteries, and the backward state of science, in that country, is, in some measure, to be ascribed to their influence. In Spain, also, this order has flourished, though the influence of the Lazarites there has not been so great. Austria has admitted them more recently.

LAZARUS ; the name of a leprosy beggar mentioned in sacred history. (*Luke* xvi. 20.) The memory of a monk of this name, belonging to the ninth century, is celebrated by the Roman church (Feb. 21), because neither the threats nor the violence of Theophilus, emperor of Constantinople, could prevent him from painting images of the saints. The former afterwards became patron of the sick, particularly of lepers, and in Palestine was instituted the order of St. Lazarus, whose members, called *knights hospitallers of St. Lazarus of Jerusalem*, took care chiefly of persons afflicted with the leprosy. This disease was spread in Europe by the crusaders ; and the hospitals, which, till the thirteenth century, were frequently established for lepers, received the name of *lazarettos*, which, at a later period, was extended to all hospitals. (q. v.)

LAZULITE is rarely found in perfect crystals, more often granular, or in pieces not exceeding the size of a hazel-nut. It is somewhat translucent, of a fine blue color, of different shades ; nearly as hard as quartz. Its primary form is a right rhombic prism ; the direction of its cleavages has not been determined ; specific gravity, 3.05. Before the blow-pipe, it intumesces a little, and assumes a glassy appearance, where the heat has been highest, but does not melt. It consists of phosphoric acid 41.81, alumine 35.73, magnesia 9.34, silex, 2.10, oxide of iron 2.64, and water 6.06. It is found in narrow veins, traversing clay-slate, with quartz, in Salzburg.

LAZZARONI ; a class of persons in Naples (formerly about 40,000), without employment or home, and without any settled means of support, the greatest part of them living for the whole year, both day and night, in the streets and public places. The extreme fruitfulness of the soil, which renders subsistence very easy, the extraordinary temperance of the inhabitants, and the warmth of the climate, and the

indolence which it produces, have given rise to this class of men. The little which is absolutely necessary, they easily pick up, in the capacity of messengers, porters and day-laborers, without hard work. Hence, in spite of their great number, they are extremely good-natured and peaceful, and mildly put up with insults and provocations from the other classes. In Naples is found every thing which can make such a life practicable; hence a *lazzarone* never leaves the city without the most pressing necessity. The desire of property and of more of the comforts of life, with more industrious habits, was first introduced among these people in modern times, under the reign of Joseph Bonaparte, when they were employed in making excavations, &c., and received part of their pay in domestic utensils and furniture, that they might become accustomed to a home. They were also collected in villages, where it was intended to educate their children. The police regulations of king Joachim (Murat) also contributed to improve their condition. The *lazzaroni* consisted at first principally of sick persons from the lowest class, who, after leaving the hospitals, retained their wretched clothes, and were hence called *lazzaroni*, as being under the protection of St. Lazarus.

LEAD is a metal very anciently known; it is often mentioned by Moses. Its alchemical name was *Saturnus*. It has a bluish-gray color, and, when recently cut, a strong metallic lustre; but it soon tarnishes from exposure to the air; specific gravity, 11.358. It is soft, flexible and elastic. It is malleable and ductile. In tenacity, it is inferior to all ductile metals. It soils paper and the fingers, imparts a slight taste, and emits, by friction, a peculiar smell. It is a good conductor of heat, melts at 612° Fahr., and, when cooled, slowly crystallizes in quadrangular pyramids. It is but slowly affected by the atmosphere at common temperatures; but, when maintained in a state of fusion, it absorbs oxygen rapidly, and is converted into a dull-gray dross or powder. When this dross is heated to a low ignition, it becomes of a dull-yellow color, and is called *common massicot*; and, by a higher heat and longer exposure to the air, it assumes a deeper yellow, and is then called *massicot*. This is the *protoxide of lead*, and consists, in 112 parts, of 104 lead and 8 oxygen. It is insoluble in water, melts at ignition, and is unchanged by heat in close vessels. When it contains about four per cent. of carbonic acid, it is called *litharge*. It unites with acids, and is the base of all

the salts of the lead. If the protoxide, or metallic lead, be subjected, during 48 hours, to the heat of a reverberatory furnace, it passes to the condition of red oxide, or what is commonly called *minium*, or *red lead*. This is regarded by doctor Thomson as a mixture of the protoxide and deutoxide of lead. After the protoxide is separated by acetic acid, the *deutoxide*, of a dark red color, remains. Its composition is, in 116 parts, 104 lead, 12 oxygen. The *peroxide of lead* is formed by passing chlorine gas through a solution of acetate of lead. Its color is brown. Heated moderately, especially with the addition of sulphuric acid, it gives out oxygen, and becomes deutoxide, and at a cherry-red heat it passes to the state of the protoxide: 120 parts contain 104 of lead. Lead forms a compound with chlorine, as it is supposed at present, in the ratio of 104 of the former to 36 of the latter. The union is effected by exposing the metal in thin plates to the action of chlorine gas, or, more easily, by adding muriatic acid, or a solution of common salt, to the acetate or nitrate of lead dissolved in water. This *chloride* fuses at a temperature below redness, and forms, as it cools, a semi-transparent, horny mass, sometimes called *horn lead*, or *plumbum corneum*. It bears a full red heat in close vessels without subliming. The pigment called *mineral*, or *patent yellow* (also *fused sub-muriate of lead*), is a compound of the chloride and protoxide of lead. It is prepared for the purposes of the arts by the action of moistened sea-salt on litharge, by which means a portion of the protoxide is converted into chloride of lead. It is a paint little used, however, in consequence of the preference given to the chrome yellow. An *iodide of lead* is easily formed by mingling a solution of hydriodic acid, or hydriodate of potassa, with the acetate or nitrate of lead dissolved in water. It is of a rich yellow color, and is deposited from boiling water on cooling, in crystalline grains of a brilliant lustre. Lead combines with sulphuric phosphorus. The *sulphuret* may be made by simply heating lead and sulphur together, or by the action of sulphureted hydrogen on a salt of lead. It is an abundant natural product, and is known under the name of *galena* in mineralogy. The *phosphuret of lead* is formed by dropping phosphorus into melted lead contained in a crucible, or by heating equal parts of lead filings and phosphoric glass with one eighth of charcoal powder. It breaks into *laminae*, and is composed of 88 lead, 12 phosphorus. As respects the uses of

metallic lead and the oxides, it is well known that the former is much employed in the arts, particularly for buildings and cisterns. For the first of these uses it has many advantages. It is easily worked into any shape, on account of its great softness, and is sufficiently malleable to fold two edges over each other, so as to make it water-tight, without soldering. This is a very great advantage; since, when pieces are soldered together, the expansion and contraction, by a change of temperature, soon cause a rupture. Although it is in very general use for water cisterns, pumps, and pipes for conveying water, serious objections have, from time to time, been urged against its employment for this purpose. Doctor Christison has found that, in pure water, it is oxidized with considerable rapidity, carbonate of lead being formed by the action of the oxygen and carbonic acid of the air. But if the water, as is the case with the majority of springs, contains a small proportion of saline matter, especially if a sulphate be present, which never fails to precipitate lead from any of its solutions, the liability of the water to be prejudiced by the lead is very small. And in other cases, there can be no danger in delivering water through aqueducts of lead, provided they are constantly kept full of water, so as always to exclude the air. Great mischief has been produced by the use of lead in dairies. If the milk runs into the slightest acidity, some lead will be dissolved, and injurious consequences will follow if it is taken into the stomach. In the granulation of lead for shot, a small portion of arsenic is added. The proportion is about 2 per cent. of the white or yellow arsenic. The compound is heated red-hot for 3 hours in an iron pot, protected by a tight cover, when the contents are let fall into a reservoir of water, from a height of 10 to 150 feet, as the shot are to be coarser or finer. One part of tin and two of lead form an alloy fusible at 350° Fahr., which is used by tinmen under the name of *soft solder*. Lead also forms an imperfect alloy with copper. The metal used for common brass-cocks is an alloy of these two metals. The union of these two metals, however, is exceedingly slight; for, upon exposing the alloy to a heat no greater than that in which lead melts, the lead almost entirely runs off of itself. This process is called *eliquation*. Of the *oxides*, the mixture of the protoxide and deutoxide, which forms the red-lead, is of considerable importance as a pigment. Its manufacture in Germany is conducted

as follows: 180 pounds of lead are calcined for eight hours upon the hearth of a cupola furnace, and, being constantly stirred, it is then left in the furnace for 16 hours, and only stirred at intervals. This calcined lead, or *massicot*, is ground in a mill with water, washed on tables, and, being dried, is put into stone pots, of such a size, that 32 pounds fill them somewhat more than one quarter full. Several of these pots are laid horizontally in the color furnace, so that the flame may go quite round them, and a piece of brick is put before the opening of each pot. A fire is kept up in this furnace for about 48 hours, and the matter in the pots stirred every half hour. The process being over, the red-lead is passed through a sieve. In this operation, 100 pounds of lead generally increase 10 pounds in weight. Red-lead is also made from litharge, by heating it in pots in a reverberatory furnace. The *salts of lead* have the protoxide, as has before been remarked, for their base, and are readily distinguished by the following general characters:—1. The salts which dissolve in water usually give colorless solutions, which have an astringent, sweetish taste; 2. placed on charcoal, they all yield, by the blow-pipe, a button of lead; 3. ferrous prussiate of potash occasions in their solutions a white precipitate; 4. sulphureted hydrogen and hydrosulphurets produce a black precipitate; 5. a plate of zinc a white precipitate, or metallic leaf. Most of the acids attack lead. The sulphuric does not act upon it unless it be concentrated and boiling. Sulphurous acid gas escapes during this process, and the acid is decomposed. When the distillation is carried on to dryness, a saline white mass is produced, a small portion of which is soluble in water, and is the *sulphate of lead*; it affords crystals. The residue of the white mass is an insoluble sulphate of lead. It consists of 5 acid and 14 protoxide of lead. Nitric acid acts strongly on lead. The *nitrate* solution yields by evaporation tetrahedral crystals, which are white, opaque, and of a specific gravity of 4. They consist of 6.75 acid, and 14 protoxide. A *subnitrate* may be formed by boiling in water equal weights of the nitrate and protoxide; also by boiling a solution of 10 parts of the nitrate on 7.8 of metallic lead. Acetic acid dissolves lead and its oxides; though probably the access of air may be necessary to the solution of the metal itself by this acid. *White lead*, or *ceruse* (see *Ceruse*), is made by rolling leaden plates spirally up, so as to leave the space of about an inch be-

tween each coil, and placing them vertically in earthen pots, at the bottom of which is some good vinegar. The pots are covered, and exposed for a length of time to a gentle heat in a sand-bath, or by bedding them in dung. The vapor of the vinegar, assisted by the tendency of the lead to combine with the oxygen which is present, corrodes the lead, and converts the external portion into a white substance, which comes off in flakes when the lead is uncoiled. The plates are thus treated repeatedly, until they are corroded through. Ceruse is the only white used in oil paintings. Commonly, it is adulterated with a mixture of chalk in the shops. It may be dissolved without difficulty in the acetic acid, and affords a crystallizable salt, called *sugar of lead*, from its sweet taste. This, like all the preparations of lead, is a deadly poison. The common sugar of lead is an acetate; and *Goulard's extract*, made by boiling litharge in vinegar, a *subacetate*. The power of this salt, as a coagulator of mucus, is superior to that of the other. If a plate of zinc be suspended, by a thread, in a solution of acetate of lead, the lead will be revived, and form an *arbor Saturni*. The acetate, or sugar of lead, is usually crystallized in needles, which have a silky appearance. They are flat, four-sided prisms, with dihedral summits; specific gravity, 2.345. It is soluble in $3\frac{1}{2}$ times its weight of cold water, and in somewhat less of boiling water. Its constituents are 26.96 acid, 58.71 base, and 14.32 water. Acetate and subacetate of lead in solution have been used as external applications to inflamed surfaces, scrofulous sores, and as eye-washes. In some extreme cases of hemorrhage from the lungs and bowels, the former salt has been prescribed, but rarely, and in minute doses, as a corrugant or astringent. The colic of the painters shows the very deleterious operation of this metal when introduced into the system in the minutest quantities at a time. A course of sulphureted hydrogen waters, laxatives, of which sulphur, castor-oil, Epsom salts, or calomel, should be preferred, a mercurial course, the hot sea-bath, and electricity, are the appropriate remedies. Dealers in wines have occasionally sweetened their acid wines with litharge, or its salts. This nefarious adulteration is at once detected by the use of sulphureted hydrogen water, which will throw down the lead in the state of a dark brown sulphuret. Burgundy wine, and all such as contain tartar, will not hold lead in solution, in consequence of the insolubility of

the tartrate. The proper counter-poison for a dangerous dose of sugar of lead is solution of Epsom or Glauber salt, liberally swallowed; either of which medicines instantly converts the poisonous acetate of lead into the inert sulphate. Sugar has been found to neutralize the poisonous action of acetate of lead, and therefore may be regarded as an excellent antidote to it.—We proceed now to speak of the *ores* of this metal, and the method of their reduction. 1. There exists but a single ore of lead which ever occurs in sufficient quantity by itself to justify its exploration;—that ore is the *Sulphuret*. (See *Galena*.) It not infrequently happens, however, that the veins and beds of this species embrace a variety of other ores of lead dispersed through them, which, being mingled with the sulphuret, materially augment the yield of that ore, and which, therefore, require to be noticed, not merely as objects of natural history, but as of value to the miner, who, from their often unpromising aspect, is liable to overlook them among the refuse matters of the mine. In addition to what has already been said of the sulphuret under the article *Galena*, we give here a simple mode of assaying a small portion of this ore. Separate 50 grammes of it as perfectly as possible from the engaging rock, or gangue; pulverize it, and, mingling it with 12.5 grammes of iron in small pieces (small tacks, for example), introduce the mixture into a Hessian crucible, which, being placed within a second one, is to be exposed to the heat of a wind-furnace, or of an ordinary forge, during 15 minutes; it is then removed, suffered to cool, and broken: a button of lead occupies the bottom of the crucible, which, on being weighed, makes known the richness of the ore. 2. *Carbonate of Lead*, or *White Lead Ore*, so called from its prevailing color, like all the salts of lead, is perfectly unmetallic in its appearance, and is not unfrequently rejected from among common lead ore, as an earthy mineral. It is both crystallized and massive. The crystals are very oblique four-sided prisms, six-sided prisms variously terminated, acute, double six-sided pyramids, tabular crystals, and twin and macle crystals. They cleave parallel to the sides of a right rhombic prism of 117° and 63° , which is the primitive form of the species. Lustre adamantine; hardness equal to that of calcareous spar; brittle; specific gravity, 6.26. It dissolves with effervescence in muriatic and nitric acids, yields a metallic globule on charcoal before the blow-pipe, and is composed of oxide of lead 82, carbonic acid 16, and

water 2. This species often occurs massive, and intermingled with earth and metallic oxides, and is sometimes tarnished and blackened, so as to be with difficulty recognised. It occurs in veins in primitive and secondary countries, accompanying galena and other ores of lead. It is pretty abundant in European countries, but has been found very sparingly in the U. States.

3. *Sulphate of Lead*. Its principal crystallizations are an oblique four-sided prism, variously bevelled or truncated, and a broad, rectangular, four-sided pyramid. It admits of cleavage parallel to the planes of a right rhombic prism of $103^{\circ} 42'$ and $76^{\circ} 18'$, its primitive form; lustre shining, adamantine; fracture conchoidal; translucent; hardness that of calcareous spar; streak white; brittle; specific gravity, 6.3. It decrepitates before the blow-pipe, then melts, and is soon reduced to the metallic state. Its constituents are, oxide of lead 70.5, sulphuric acid 25.75, water 2.25. It occurs, not very plentifully, in the Hartz, Spain, England and Scotland.

4. Mr. Brooke has described, within the few last years, three other varieties of lead ore; one of which consists of 46.9 of carbonate and 53.1 of sulphate of lead; another of 55.8 of sulphate, 32.8 of carbonate of lead, and 11.4 of carbonate of copper; the remaining one of 74.4 sulphate of lead, 18. oxide of copper, and 4.7 of water. These will, doubtless, constitute distinct species.

5. *Chromate of Lead* is of a deep orange-red color; when pulverized, orange-yellow. It occurs crystallized and massive; cleaves parallel to all the planes of an oblique rhombic prism of about $93^{\circ} 30'$ and $86^{\circ} 30'$. The cross fracture is uneven, passing into conchoidal, with a splendid lustre. It is sometimes translucent; brittle; specific gravity, 6. When exposed to the blow-pipe, it crackles and melts into a grayish slug. It consists of oxide of lead 63.93, chromic acid 36.40. It has hitherto been found only in Siberia, where it occurs in a vein traversing gneiss and mica slate in the gold mine of Beresof, and in a sand-stone near the same place.

6. *Molybdate of Lead* occurs crystallized in obtuse octahedrons, variously modified, and in tabular crystals. It cleaves parallel to the sides of a right square prism, its primary form; color wax or honey-yellow; lustre resinous; translucent; hardness below that of calcareous spar; brittle; fracture uneven, passing into conchoidal; specific gravity, 5.09. Before the blow-pipe, it decrepitates; on charcoal, it fuses into a dark-gray mass, in which globules of reduced lead are visible. It consists of 58.4 oxide of lead, 38

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molybdic acid, and 2.08 oxide of iron. It occurs principally at Bleiberg in Carinthia, with other ores of lead. It has also been found, in very small quantity, in the U. States, at Southampton, in Massachusetts.

7. *Phosphate of Lead* occurs crystallized in the form of a six-sided prism, generally modified on the edges; and, as it cleaves parallel to the sides of the hexagonal prism, the figure is regarded as its primary form; color, shades of green and yellow; translucent; lustre resinous; fracture imperfect, conchoidal, uneven; brittle; hardness equal to that of calcareous spar. Besides occurring in distinct crystals, it assumes globular, reniform, botryoidal and fruticose shapes. Before the blow-pipe, it melts by itself upon charcoal, and the bead exhibits, in cooling, crystalline facets. It consists of oxide of lead 78.58, phosphoric acid 19.73. In some varieties of this species, arsenic acid is substituted for phosphoric acid. Phosphate of lead is found accompanying the common ores of lead, though rarely in any considerable quantity. Finely crystallized varieties are found at Przibram in Bohemia, at Huelgoet in Brittany, at Lead-hills in Scotland, and at Cornwall in England. In the U. States, it occurs at the lead mine near Freyberg in Maine. Such are the ores of lead, all of which, with the exception of the chromate, are more or less employed in furnishing the lead of commerce; but the salts, as has been remarked above, in very limited quantity, compared with the sulphuret. As the principal thing in the metallurgic treatment of these ores, is to expel the sulphur, after picking and pulverization, they are roasted either in the open air, or in reverberatory furnaces. During this operation, the sulphur volatilizes, and the lead, reduced to the metallic state, or to that of an oxide, runs into the basin, or crucible of the furnace, where it is deoxidized by being maintained in contact with ignited charcoal. Thus, by this method, which is that generally adopted, the sulphuret passes at first to the state of an oxide in the reverberatory furnace, afterwards is converted principally into the metallic state, and the remainder is passed into other furnaces, where a renewed heating with charcoal compels it to give up its oxygen, and to assume the condition of perfectly metallic lead. There is another mode of treatment practised in Germany and France to a considerable extent. It consists in presenting to the sulphur of the ore a substance with which it has a more powerful affinity than with the lead; this substance

is iron. The workmen commence by melting the ore in a reverberatory furnace of small size, and when the bath is full, they throw in 28 per cent. of old iron. In a little time, the sulphur passes from the lead to the iron, leaving the former metal free, which occupies the bottom of the basin. By this means, the same quantity of ore is reduced as in the first described process, with the advantage, too, of a considerable saving of time, and with one half of the labor; but it is attended with the complete loss of the iron, which, in some districts, however, is so cheap as to be of no consideration. England produces about half the lead of Europe; the Hartz, Austria, Prussia and their dependencies nearly all the remainder. The lead mine of Galena, in Illinois, yielded, in 1829, about 6000 tons of lead.—It is pretty certain that both lead and tin were employed, in extremely remote ages, in the fabrication of arms, and, above all, in the ornamental parts of them. Homer also alludes to the practice of putting leaden balls at the end of fishing-lines. The custom of writing on lead mounts also into very great antiquity. Frontinus and Dio Cassius assure us that the consul Hirtius, besieged in Modena, wrote upon a leaf of lead, respecting his situation, to Decius Brutus, who replied by the same means. Pausanias speaks of certain books of Hesiod written upon sheets of lead; and, if we may believe Pliny, even public acts were consigned to volumes or leaves of the same material. The poets make frequent allusion to leaden coins. Ficorini, in his *Piombi Antichi*, has collected and represented a vast number of monuments of this kind. Caylus conceived them to be all Roman; and thus, according to that writer, those even which represent Egyptian divinities, or are inscribed with Greek characters, are yet to be referred to the times of the Roman emperors. Statues of lead are very rare.

Lead; an instrument for discovering the depth of water. It is composed of a large piece of lead, from seven to eleven pounds in weight, and is attached, by means of a strap, to a long line, called the *lead-line*, which is marked at certain distances, to ascertain the fathoms.—*To heave the lead*, is to throw it into the sea in a manner calculated to produce the desired effect.—*Deep-sea lead*; a lead of a larger size, being from 25 to 30 pounds weight, and attached to a much longer line than the former, which is called a *hand-lead*.

LEENA; an Athenian *hetæra* (q. v.), mis-

tress of Aristogiton. Being privy to the conspiracy of Harmodius and Aristogiton against the Pisistratidæ, when examined on the subject, she bit off her tongue, that she might not be able to speak. A statue was erected by the side of those of the tyrannicides, in honor of her, representing a lioness without a tongue, by the side of which was an image of Venus, whose priestess she was.

LEAF. As it is impossible to give an entirely satisfactory definition of what is meant by the word *plant*, or *animal*, so it has equally defied the exertions of naturalists to give a distinct definition of *leaf*. Leaves are the part of the vegetable world in which vegetable life manifests itself most strongly. Light and air, which so essentially influence the vegetable kingdom, act chiefly on the leaves; and, in relation to the air, leaves have been compared to the animal organs of respiration—to lungs placed externally. They are also organs of nutrition, particularly on the lower surface. The same formation which prevails in the trunk, branches and roots, has been recognised in leaves, only that what in the former is annular and concentric, in the latter is spread out over an extended plane surface. The spiral vessels and sap vessels, which are observable in the leaf-stalk, are also partly to be traced in the leaf, and form the nerves and veins, which may be considered as the skeleton of the leaf. The spaces between them are filled with a cellular substance, covered by a soft, yet firm cuticle. The cellular substance and the cuticle are different on the upper and the lower surfaces; and, however various the form of the leaves, much conformity always exists in this respect, and is intimately connected with the life of the plant. The cellular substance is particularly filled with sap, generally of a green color. The cells of the upper surface are commonly disposed lengthwise; those of the lower surface, breadthwise; both commonly destitute of sap. The pores, which are generally only on the lower surface (except in plants whose leaves lie on the water, or close on the ground), serve to transmit the air to the internal parts of the plant; but in some plants they are not discernible, even in some of the more perfect kinds, particularly if the sap is not green. The leaf changes whatever passes through it into the plant from without, or from the plant; and so essential is the influence of light upon vegetable life, that the gaseous substances given out by plants, in the sun, or in the shade,

or by night, are chemically different. Sound and green leaves, in the sun, exhale oxygen and absorb carbonic acid gas; but by night, or in the dark, they give out carbonic acid gas, and absorb oxygen from the air: sickly plants, and those whose leaves are not green, do this in the sun. The green color, the almost universal hue of plants, is so intimately connected with light, that young plants do not begin to assume this color until they come into the light. The importance of leaves to plants is shown by the fact that no plant can grow, nor form blossoms, nor fruits, if deprived of leaves. When fruit has arrived at a certain degree of maturity, it may, indeed, be ripened more rapidly by depriving the plant of its foliage; but this only proves a diseased state. The fine hairs with which leaves are covered, and which sometimes become bristles, contribute considerably to the exhalation and absorption of air and moisture; so that a plant often owes its nourishment to the atmosphere more than to the ground; and many plants exhale much more aqueous matter than, on the highest estimation, they can receive from the ground. The leaves, moreover, have often an important part in the secretion of oily or other substances. There are whole orders of plants, consisting almost entirely of leaves, as certain mosses, heaths, and others, in which the leaf gives place almost entirely to the stem, so that an intermediate formation between the two is presented, as in the *cactus*, *euphorbia*, *stapelia*, &c. In many cases, the leaf proceeds only from the joints of the stem, as in the grasses; and, in this case, it retains much of the nature of the stem. No part of the plant is capable of such an immense variety of forms as the leaf, the description of which would exceed our limits. The leaves form an important characteristic in the subdivision of plants. They are divided into simple and compound, the latter class consisting of those in which several leaves are supported on one footstalk; and their various subdivisions are formed on the form 1. of the apex; 2. of the base; 3. of the circumference; 4. of the margin; 5. of the surface; 6. on their position; 7. their substance; 8. their situation and position; 9. their insertion; 10. their direction. The *lobe* of a leaf is the segment around the apex.—We will add here some interesting items of a memoir on the structure of leaves, read quite lately by M. Adolphus Brongniart, before the academy of sciences at Paris. The author states that the leaves of plants that live in the air have a

totally different structure from those that are completely submerged, and that this difference in the structure of organs is in direct relation to the two principal functions of leaves—respiration and transpiration. In leaves exposed to the air, the surface of the leaf is covered by an epidermis of uncertain thickness, formed of one or more layers of colorless cellules, closely packed together. This membrane is pierced with the pores usually known by the name of *stomata*. The doubts that have been entertained of the existence of perforations in these stomata, M. Brongniart thinks he has removed, and that it is certain that, in the centre of each stoma, is an opening by which the outer air communicates with the parenchyma. The parenchyma is evidently the seat of respiration; for it is the part that changes color in exercising this function, which becomes green by the absorption of the carbon of the carbonic acid of the atmosphere, and which is discolored again, in darkness, by the combination of the carbon of its juices with the oxygen of the air. This parenchyma differs entirely from that of other organs, by the numerous irregular cavities that it contains, which communicate with each other and the outer air by means of the openings of the stomata. It is into these cavities, in the cavernous parenchyma of aerial leaves, that the atmospheric air penetrates, when it is absorbed by the surface of the utricles of the parenchyma, that are distended with the fluids which seem to nourish the plant. According to M. Brongniart, aquatic leaves, if submerged, differ in being completely destitute of epidermis. It is not alone stomata that they want, as has long been known, but the epidermis also. There are none of the cavities that abound in the parenchyma of aerial leaves, but, on the contrary, the cellules of the tissue are compactly fastened together, without any interstice, and the air, dissolved in the water, can only act on their outer surface. For this reason, the proportion borne by this surface to the whole mass of the leaf, is unusually great. The leaves, from want of epidermis, dry up quickly when exposed to the air, and can only exist in water, or a very humid atmosphere. Hence the author concludes that the epidermis is destined to protect aerial leaves against too rapid evaporation, and the stomata, or pores, of this epidermis become necessary to maintain a communication between the atmosphere and the parenchyma.

LEAGUE; a measure of length, containing more or fewer geometrical paces,

according to the different usages and customs of countries. A sea league contains 3000 geometrical paces, or three English miles. The French league sometimes contains the same measure, and, in some parts of France, it consists of 3500 paces. The mean or common league consists of 2400 paces, and the little league of 2000. Twenty common Spanish leagues make a degree, or $69\frac{1}{2}$ English statute miles. The German league (*meile*) contains four English geographical miles. The Persian league is also equal to four such miles, pretty near to what Herodotus calls the length of the Persian *parasang*, which contains 30 *stadia*, eight of which make a mile. (See *Mile*.)

LEAGUE. Those political connexions which have been called *alliances*, since the French language has become the fashionable language of Europe, were denoted, during the prevalence of Spanish and Italian influence, from 1500 to 1650, by the term *league* (from the Spanish word *liga*). To some alliances this term is more distinctly applied. Among these are the league of Cambrai, formed, in 1508, between Louis XII, king of France, the German emperor Maximilian, and Ferdinand of Spain, for the purpose of humbling the republic of Venice, and which was joined, in 1509, by pope Julius II. This league was dissolved in 1510, as many similar ones have been, in consequence of mutual distrust, and was succeeded by the *liga santa*, or holy league, between the pope, Maximilian, Ferdinand and Venice. The object of this was to compel Louis XII, whose allies had now become his enemies, to renounce his conquests in Italy; which object was gained. This was the first example of a holy league, which name was derived from the participation of the pope. Thirty years afterwards, a holy league was formed in Germany. For when the principal Protestant princes in Germany united, in 1536, to form the union of Smalkalden, in order to protect their common faith, and withstand the emperor Charles V, the Catholic princes assembled at Nuremberg, in 1538, to take measures for the support of their own faith, and to oppose the designs of the Protestant princes; and, as their league had the protection of the Catholic church for its object, they termed it the *holy league*. A fourth league, also, called the *Catholic*, was formed by Henry, duke of Guise, in 1576, against Henry III of France. Its ostensible object was the support of the Catholic religion; but the duke of Guise had further views of his own. As Henry

III was without male heirs, the throne, at his death, would pass to the Protestant prince Henry of Navarre; to exclude whom, and to obtain the throne for himself, were the real objects of the duke of Guise. His great popularity seemed to render the accomplishment of his design easy. The example given by Paris in his favor was followed by all the provinces. The league was sanctioned by the pope and the king of Spain. In 1588, the duke of Guise was murdered at Blois, with his brother Louis, the cardinal, at the king's instigation. The league then declared the throne vacant, and named the third brother, Charles, duke of Mayenne, governor-general of the kingdom. Henry III now sought relief in the camp of his former enemy, Henry of Navarre. He was there assassinated in 1589. The war was then pursued by the league against Henry of Navarre, till it was ended, in 1594, by his uniting himself to the Catholic church; and the next year the league was dissolved. We find a fifth league, in Germany, in the seventeenth century, also termed *Catholic*. The peace of 1555 had not sufficiently restrained the Protestants, and had taken too much from the Catholics. Both parties regarded each other with distrust. The one was accused of encroachments; the other, of unreasonable pretensions. As Henry IV of France was ready to support the Protestant princes in any manner, for the purpose of humbling the house of Austria, these princes, excited by the injuries inflicted upon the Protestant town of Donauwerth, assembled in 1608, to form a union for their protection. The Catholic princes now took the same steps as after the union of Smalkalden: their association (1610) was also hastened by the disputes respecting the succession of Juliers-Cleves. The principal German princes laid claim to the possessions of John William, duke of Juliers-Cleves-Berg, &c., who had died, in 1609, without heirs. Henry IV supported the Protestant princes: a league was therefore formed, by the Catholic princes, at Wurtzburg, in 1610, at the head of which was Maximilian, duke of Bavaria. The unexpected death of Henry IV prevented their coming at once to action; but the union and the league kept up a vigilant opposition to each other till the breaking out of the 30 years' war. The head of the union, Frederic, elector-palatine, became king of Bohemia; and then the two parties took the field. An accommodation was at last effected at Ulm, July 3, 1620, by means of the united French, Spanish, Austrian

and Bavarian influence, in which the union gave up the Bohemian cause, and, after the imperial arms had become victorious in Bohemia, the union was wholly dissolved in 1621. The designs of the Catholics were so well supported by the duke of Bavaria, and his general Tilly, at the head of the troops of the league, that nothing but the interference of Gustavus Adolphus saved the Protestant princes.

LEAGUE OF THE PRINCES. (See *Confederation of the Princes.*)

LEANDER. (See *Hero.*)

LEASE. A lease is a demise of lands or tenements, or permission to occupy them for life, or a certain number of years, or during the pleasure of the parties making the contract. The party letting the lands or tenements is called the *lessor*; the party to whom they are let, the *lessee*; and the compensation or consideration for the lease, the *rent*. There is a great difference in the habits and usages of different communities, as to the modes of occupying lands, and the usual interest and title of the occupants. A great part of the cultivated territory of Europe is occupied by lessees, and rents constitute an immense proportion of the income of persons living upon profits, as distinguished from those who depend partly or wholly upon the fruits of their own labor; so that, in all economical speculations in Europe, in regard to agriculture and the profits of lands and tenements, as distinguished from other species of property and income, the lands are always spoken of as being occupied by lease-holders; whereas, in the U. States, though the tenements in the large towns are usually occupied by lease, and, in the country, many farms are cultivated by those who have only a temporary interest in the soil, yet a great part of the territory is in the possession and occupancy of the proprietors. The general habit and prejudice is in favor of the occupant possessing the fee, and if his capital is not adequate to an independent and unincumbered ownership, he generally prefers to purchase, though he mortgages the land as security for the purchase-money, rather than to hire. This mode of occupying would seem to excite a much more general disposition towards permanent improvements, since the person making them has not only in view the immediate advantage of the increase of products, but also the remote advantage of the increase of the value of the estate. Where leases prevail, however, it is the policy of the proprietors, as well as tenants, to extend the terms to long periods,

and thus to give the parties a joint interest in improvements. The state of agriculture, in many parts of Europe, where the system of leases prevails, shows that this system is not so unfriendly to improvements in cultivation as to prevent agriculture from being brought to great perfection under it. But still, all things else being equal, it is quite evident that the proprietor himself will have the strongest motives to a mode of cultivation which adds to the permanent value and productiveness of the soil. It does not, however, follow, that occupancy and cultivation by proprietors are, on the whole, to be preferred, in all possible states of the arts, population and wealth of a community. The prevailing occupancy by proprietors has the necessary effect of dividing the territory into small farms; the preference of one system or the other will, therefore, depend partly upon the kind of production carried on; for there is no doubt that some species of cultivation can be conducted more effectually, and so as to yield the greatest aggregate of products, if they are conducted on a large scale. In all kinds of industry, whether agricultural, commercial or manufacturing, a great saving may be made, and greater results produced by the same labor, by combining the operatives in a large system. This is undoubtedly promoted by the system of leaseholds, since the wealthy are thereby induced to invest their capital in lands, as the safest property, and yielding the most secure income. The result will be, that the territory will be owned and leased in large tracts. This is the reason why the leasehold system, instead of checking the progress of agriculture, probably, on the whole, contributes to it, notwithstanding the fact that a lessee, though for a long term, has less interest in increasing the permanent productiveness and value of the soil, than the proprietor himself. There is, however, one disadvantage in the leasehold system, and a corresponding advantage in small proprietaries, as the former creates a population of mere laborers, called *cottagers* in England, and *peasants* in the rest of Europe, who, in general, depend wholly upon their wages for subsistence, and who naturally become very numerous, in proportion to the demand for their labor, so that, by their competition for employment, their wages become reduced to the means of a bare subsistence. The labor in which they are employed is the rudest, and requires the least skill and previous instruction of all the different species, excepting, perhaps,

fishing. The consequence is, the raising a great population, of a rude, uncultivated character, without property, and with very little self-respect or consideration with the rest of the community, and who finally become detached from the rest of the society, and have no avenue of escape from their humble condition, so that all generous emulation and enterprise die away from among them. It is true, that this class is not usually a restless, turbulent or dangerous part of the community; and it is convenient, perhaps, to those who do not happen to fall within it. But those who desire to see human nature only in a condition of existence admitting of moral and intellectual culture, and whose philanthropy makes them wish that the whole population may participate in the general mass of intelligence, knowledge and accomplishments, as equally as is practicable, would prefer that no such class should exist as a distinct body, for precisely the same reason that they would not wish to see any part of the population reduced to servitude. A division of the territory into small proprietaries, and a consequent infusion, through the mass, of a desire of saving, and of possessing something, and the stimulus afforded to enterprise, by opening to every individual, even the lowest, access to the next higher class, excites an independence of spirit, an energy and activity, whereby the character of the people is elevated. But whatever may be, abstractly, most desirable, the condition of the various members of the community is governed, in a great degree, by the operation of economical causes, the influence of which cannot be controlled. The power to lease will necessarily depend upon the extent of the lessor's estate in the land or tenement to be leased. A proprietor who has only a life-estate can, of course, lease his property only during his life. This is the case with a great part of the landed estates of Europe, the very object of entailments, and other limitations, being to secure the property against alienation, and against incumbrances to the prejudice of the heir or successor to the inheritance; and yet, if the incumbent could not make a lease for a certain time, it would be a great abridgment of the value of the estate to himself, as well as to his successor. The laws, therefore, provide, that certain proprietors of estates for life may lease, on certain terms, for any time not exceeding a certain period, as 21 or 40 years. The laws of the U. States contain very few legislative provisions on this subject. The Eng-

lish common law makes a distinction as to the dignity of leasehold estates, which, in many cases, does not correspond to their comparative value and importance, the maxim being, that a life-estate, being a freehold, is greater, or of more dignity, than a lease for ever so many years, as a hundred or a thousand. A freehold is real estate; whereas a lease is but a chattel interest, though the term may be longer than the longest life. The laws prescribe certain forms for the conveyance of real estate, requiring it to be by deed. These regulations extend also to leaseholds, usually requiring that a lease for more than a certain number of years, as three or seven, shall be in writing. A mere oral lease is binding for a shorter period; and when there is no specified period of occupancy, the term is understood to be determined either by the agreement for the payment of rent, as a tenement, held on condition of paying a monthly rent, is understood to be let for the term of a month at a time, or it is determined by the nature of the estate leased, as a farm is, in a mere verbal lease, understood to be let for one year, this being the shortest time for which it is supposed the parties would intend to contract. So it is held in England, and probably the same rule is law in the U. States, though the decisions in some of the states seem to imply, that the letting is also, in this case, determined by the period of payment of rent. But it can hardly be presumed that the parties could intend that the tenant should plough, and plant, and pay rent, and then quit. Leases usually stipulate that, in case of failure to pay rent, the lessor may enter and expel the tenant. As to notice to quit, if the lease be for a certain time, no notice to quit at its expiration is necessary; but if the tenancy be at will, or by sufferance, it can be determined by either party only at the end of the term for which the contract is construed to run; and the party intending to terminate it at the end of any term, is bound to give previous notice of such intention. The general rule, in this respect, is that of reasonable notice; but what is reasonable is subject to diverse interpretation. Though a lease is terminated, yet the tenant may enter afterwards, to harvest the crops of the fields planted by him before the expiration of his lease. The landlord has one privilege over other creditors of the tenant, in respect to his rent, having a right to distrain chattels on the premises, to enforce and secure payment of it. This remedy exists in England and some of the U.

States, but in other states, the landlord has no preference over any other creditor, in respect to any property whatever of the tenant. A question has been much discussed, and the subject of frequent adjudications, as to the right of the tenant, at the expiration of his lease, to remove fixtures erected by him on the leased premises. The old doctrine was, that whatever he attached to the land, or freehold, became thereby a part of the real estate, and that he had not, accordingly, any right to remove it at the expiration of the term. This doctrine was first relaxed, in England, in favor of trade, as it was expressed, meaning, however, industry in general; and, on this principle, a very liberal construction was put upon the tenant's right to remove, at the end of his term, any erections put up by him, for the purpose of carrying on his business, whatever it might be. For this purpose, however, these fixtures must be such that they may be removed without injury to the estate. Things incorporated with the freehold, as repairs put upon a building, remain a part of the real estate, and the tenant has no right to remove them, as they thus become the property of the landlord, although the tenant may have been under no agreement or obligation to make the improvement. The right of the tenant, in this respect, is still more liberally construed in the U. States, and there seems to be no reason why he should not have the liberty of erecting any works or buildings on the premises, or removing them at the expiration of his term, provided he can do so without any injury to the estate; and the tendency of the decisions is towards the establishment of this doctrine.

LEATHER. (See *Tanning*.)

LEBANON, or LIBANUS, and ANTILIBANUS; two parallel ridges of mountains in Syria, bounding Palestine on the north. The highest summit of Lebanon is 9600 feet. The cities Saida (the ancient Sidon) and Tarabolus (Tripoli in Syria) are situated at its base. In the parts of the mountain near the latter city, there are a few specimens remaining of the cedars of Lebanon, which the Phœnicians used in their naval architecture. (See *Larch*.) Antilibanus, or the northern part of the range, is inhabited by the Mutavelis; the southern, by the Druses. (See *Druses*.)

LEBANON, NEW; a post-town of Columbia county, New York; 7 miles W. Pittsfield; 27 S. E. Albany; population, see *U. States*. It is situated on the turnpike, between Pittsfield and Albany. The village has a pleasant, picturesque situation,

and is well built. Here is a spring of considerable celebrity, issuing from a high limestone hill, so copiously that the quantity amounts to 18 barrels in a minute. The water contains some lime in solution, but differs very little from very pure mountain water, except by its remarkable temperature, which is that of 73° Fahr., not varying perceptibly at any season. The spring is kept in constant ebullition by a copious emission of azotic gas. It is useful in salt rheums and various other cutaneous affections. The waters are used without injury for all domestic purposes. On the western side of the mountain, opposite to the spring, two miles and a half distant, is a neat village of Shakers, containing about 500 inhabitants. The houses are on a street about a mile in length, and are painted of an ochre yellow. (See *Shakers*.)

LEBRUN, Charles, born at Paris in 1618, first painter to the king, was the son of a statuary of ordinary talent. As early as his third year, he sketched with coal, and, at 12 years old, painted a portrait of his grandfather, which is not considered the worst of his paintings. He studied with Vouet, and soon surpassed not only all his fellow pupils, but also his master. After his return from Rome, where, under Poussin, he had studied principally the works of Raphael, and the remains of ancient art, he received the order of St. Michael, and, in 1648, was made president of the new royal academy of painting and sculpture. He was also named prince of the academy of St. Luke, in Rome. From 1661, he was principally employed in embellishing the residences of Louis XIV and his nobles with works of art, and in superintending the brilliant spectacles of the court. He embellished Versailles, in particular, and was also director of the royal Gobelins (q. v.) manufactory. With the death of Colbert, his influence declined. He died in 1690. Lebrun possessed a comprehensive genius, which was cultivated by the incessant study of history and national customs. Few painters have so well understood the human character, and the expression of the passions. This appears from his treatises *Sur la Physionomie*, and *Sur les Caractères des Passions*. In invention, he equalled the greatest artists who had preceded him. He combined a correct judgment with a lively imagination and facility in execution. He aimed at the highest accuracy of detail, consulting the remains of antiquity, books and learned men, on the minutest subjects. His weak point in painting was his coloring, particularly of flesh.

LEBRUN, Ponce Denis Ecouchard, a celebrated poet, who, during his life, received the appellation of the *French Pindar*, was born in 1729, and became secretary to the prince of Conti. At the age of 26, he had taken his place in the first rank of lyric poets. At the revolution, he celebrated the birth of freedom in odes and epigrams; but, as the prospect darkened, he changed his tone, and, in 1793, deplored, in harmonious verses, the fate of his country, oppressed by tyrants and anarchists. When the academical establishments were reorganized, Lebrun became a member of the institute. He received from Bonaparte, when consul, a pension of 6000 francs. He died September 2, 1807.

LEBRUN, Charles François, duke of Placentia, descended from an humble family in the vicinity of Coutances, came, at an early age, to Paris, where he obtained the protection of M. de Maupeou, whose secretary he became, after having been tutor to his children. He is said to have composed, in 1770, the speech which that gentleman delivered during his dispute with the parliaments. Being nominated deputy to the states-general (1789), he occupied himself, during the session, with affairs of police, finance and domestic administration. When the question of the church property was discussed, he maintained that it would be an act of injustice to divest the ecclesiastical bodies of their possessions, though he admitted that some reform was necessary and expedient. In August, 1790, he voted for the preservation of the French academy, and, in September, he appeared at the tribune, to deliver an opinion against the emission of assignats; but he could not procure a hearing. In 1795, he was elected to the council of elders, and became secretary to that body in January, 1796, and president in the February following. In November, 1799, he approved of the new system of government, and was appointed third consul in December. In 1803, the third class of the institute, of which he had continued to be a member from its first formation, chose him their president. He was nominated arch-treasurer of the empire in 1804, and, in 1805, governor-general of Liguria, and created duke of Placentia. On the retreat of Louis Bonaparte from the throne of Holland, Napoleon confided to M. Lebrun, under the title of *governor-general*, the administration of that country, from which the events of 1813 obliged him to retire. On his return to France, he signed the constitution that recalled the house of

Bourbon to the throne, and was sent to Caen in the quality of commissioner extraordinary. On the 4th of June following, he was created a peer of France by the king, and, in the beginning of July, was appointed president of the first bureau of the chamber of peers. After the return of Napoleon, he accepted the peerage from him, and likewise the place of grand-master of the university. By this proceeding M. Lebrun rendered himself incapable of sitting in the new chamber of peers, formed in August, 1815. In the early part of his life, he published, in prose, a translation of Tasso's *Jerusalem*, more remarkable for its elegance than its fidelity. A new edition of this work appeared in 1805, with an account of the life of Tasso, by Suard (2 vols. 8vo.). He also made a prose translation of Homer's *Iliad* (3 vols., 8vo.), which has frequently been reprinted. He died in 1824.

LECH; a river rising in the Vorarlberg, and emptying into the Danube. It gives its name to the Lechfeld, a plain in Bavaria rendered famous by the defeat of the Huns (q. v.), by Otho I, in 955.

LECTOR (*reader*), in the early church; a servant of the church, whose business it was to read parts of the Bible, and other writings of a religious character, to the people. They were consecrated by prayers and ceremonies for this office, and, when their office became extinct, the consecration still remained; so that the lectorship now forms one of the inferior orders. Lectors are mentioned by Justin Martyr, in the second century, and appear to have been proper officers of the church in the third century. In Germany, a teacher of modern languages in a university is called *lector*, if he is not a professor.

LEDA, according to some authors, the daughter of Thestius, a king of Etolia, according to others, of Glaucus and Laophonte or Leucippe, was the wife of the Spartan king Tyn-darus. In order to enjoy her, Jupiter changed himself into a swan, or, as some say, into a goose, in which form he is represented with her in a picture from Herculaneum. By him she had Pollux and Helen, and by Tyn-darus Castor. According to other authors, Jupiter first changed her into a goose, and afterwards himself into a swan, which was the reason why Leda brought forth an egg, from which Pollux and Helen sprang. Other traditions say that Jupiter changed himself into a swan, and caused Venus to pursue him in the form of an eagle, when he took refuge in Leda's bosom. During a deep sleep, which

fall upon her at this moment, he gratified his desire. Others relate that Nemesis changed herself into a goose to escape the pursuit of Jupiter. She then brought forth an egg, which he caused to be carried by Mercury to Leda, who carefully preserved it until Helen was produced therefrom. Again it is said that Leda brought forth two eggs, one by Jupiter, and another by Tyndarus. From the former sprang Pollux and Helen; from the latter, Castor and Clytemnestra. Of these different accounts, that has obtained the preference, which makes Leda, after having had communication with Jupiter in the form of a swan, to have given birth to Castor and Pollux (Dioscuri).

LEDGER LINES; those lines which are added above or beneath the five composing the staff, for the reception of such notes as are too high or too low to be placed upon or within it.

LEDYARD, John, a celebrated traveller, was born at Groton, in Connecticut, in 1751. He lost his father at an early age, and his mother was left with but scanty means for the education of four children. To her he was indebted for counsels that made an indelible and most salutary impression on his heart. At the age of 19, he went to Dartmouth college, in order to qualify himself to become a missionary among the Indians. At the college, he acquired knowledge with ease, manifested more indocility than diligence, and had not been there quite four months when he suddenly disappeared without the knowledge of any one. He is understood to have wandered to the borders of Canada, and among the Six Nations, with whose language and manners he formed an acquaintance, which was afterwards of much service to him in his intercourse with savages in various parts of the globe. Nearly four months elapsed before he returned to his college, and, soon after, in consequence of some reproof for breach of discipline, he resolved to escape altogether. On the margin of the Connecticut river, he felled a large tree, and fashioned its trunk into a canoe, in which he proceeded down the river to Hartford, a distance of 140 miles, much of his course lying through a wilderness, and, in several places, being obstructed by dangerous falls. Ledyard then applied himself to the study of divinity, but, failing in obtaining a license to preach, he turned sailor. His first voyage was to Gibraltar, where, being struck with a military parade, he enlisted, "thinking the profession of a soldier well suited to a

man of honor and enterprise." The British commanding officer released his new recruit, who, at the expiration of a year, came back to New London, but soon afterwards embarked for England, in the hope of obtaining assistance from some wealthy relations there. After working his passage, as a sailor, to Plymouth, he remained destitute of means, and reached London by begging on the road; but, having presented himself at the house of a Ledyard, as an American cousin, he was so coolly received, that his dreams vanished, and his pride prevented him from ever renewing the attempt. Captain Cook was then preparing for his third and last voyage round the world. The idea of accompanying him struck Ledyard with so much force, that he at once enlisted in the British marine service, and soon contrived to gain an introduction to captain Cook. "His manly form," in the words of Mr. Sparks, "mild, but animated and expressive eye, perfect self-possession, a boldness not obtrusive, but showing a consciousness of his proper dignity, an independent spirit, and a glow of enthusiasm giving life to his conversation and his whole deportment—these were traits which could not escape so discriminating an eye as that of Cook. They formed a rare combination, peculiarly suited to the hardships and perils of his daring enterprise. They gained the confidence of the great navigator, who immediately took him into his service, and promoted him to be a corporal of marines." He embarked accordingly, and performed the whole voyage, of which he published an interesting account some time afterwards at Hartford, in Connecticut. In this volume, he ascribes the murder of captain Cook, in a great degree, to his rashness and injustice towards the natives of Owhyhee. For two years after the return of the expedition to England, Ledyard remained in the British navy; but nothing further is known of him, in that situation, than that he refused to serve against his country. In 1782, he made his way home, and took lodgings at Southold, with his mother, who kept a boarding house, and by whom he was not recognised, after an absence of eight years. We find him soon afterwards at L'Orient, whither he had gone in order to carry into effect his plan of a voyage to the Pacific ocean. At L'Orient, the principal merchants of the place actually furnished him a vessel of 500 tons; but when he was on the point of setting out, the voyage was entirely abandoned by its

patrons, in consequence of some misunderstanding with the government. He then went to Paris, where he concerted a scheme with the famous Paul Jones (q. v.) for accomplishing his object, which was also frustrated, and, after making other anxious and fruitless efforts, he gave up altogether the idea of reaching the North-west Coast by sea, and applied to the empress Catharine of Russia, through the medium of Mr. Jefferson, then American minister in Paris, for permission to pass through her dominions, having come to the resolution of travelling by land through the northern regions of Europe and Asia, crossing over Behring's strait to the American continent, and pursuing his route down the coast, and to the interior. After waiting, however, for an answer from the czarina for more than five months, he accepted an invitation from London to embark in an English ship, which was in readiness to sail for the Pacific ocean, and of which the owners undertook to have him set on shore on the North-west Coast. After forming his plan, which was warmly entered into by sir Joseph Banks and other distinguished men of science, and which was to land at Nootka sound, thence strike directly into the interior, and pursue his course to Virginia, he embarked with no other equipment than two dogs, an Indian pipe, and a hatchet. He now thought himself secure of his object; but the vessel was not out of sight of land before it was brought back by an order from the government, and the voyage was finally relinquished. Bearing up with wonderful fortitude against these reverses, he next determined to make the tour of the globe, from London east, on foot, and proceeded to St. Petersburg in the prosecution of this design, through the most unfrequented parts of Finland. In that city, his letters procured him eminent acquaintances, among whom professor Pallas and count de Ségur proved his chief patrons. After waiting there nearly three months, he obtained his passport for the prosecution of his journey to Siberia. On his arrival at Yakutsk, he was prevented, by the Russian commandant at the place, from proceeding any further; and at Irkutsk, whither he had returned, he was arrested as a French spy, by an order from the empress, hurried into a *kibitka* with two guards, conducted with all speed to Moscow, and thence to the frontiers of Poland, where he was released, with an intimation, that if he returned again to the dominions of the empress, he should be

hanged. After an absence of 15 months, he once more appeared in the British metropolis, to use his own words, "disappointed, ragged, penniless, but with a whole heart." He was now 37 years of age. Scarcely had he taken lodgings in London, when sir Joseph Banks proposed to him, on behalf of the African association, an expedition into the interior of Africa. He accordingly sought an immediate interview with the secretary of the association, to whom sir Joseph gave him a letter; and, on being asked by him when he would set out, he answered, *To-morrow morning*. The route traced for him, by the association, was, from Alexandria to Grand Cairo, from Cairo to Sennaar, and thence westward, in the latitude and supposed direction of the Niger. He reached Cairo, whence he was on the point of proceeding on his journey after three months of vexatious delay, when exposure to the heat of the sun, and to other deleterious influences of the climate, at the most unfavorable season of the year, brought on a bilious attack, which proved fatal towards the end of November, 1788. Zeal, activity, courage, honor and intelligence distinguished his short but remarkable career. (See Spark's *Life of Ledyard*, Cambridge, New England, 1828.)

LEE; an epithet to distinguish that half of the horizon to which the wind is directed from the other part whence it arises, which latter is called to *windward*.

LEE, Nathaniel, a dramatic poet, was educated at Cambridge, whither he went in 1668, and afterwards went to London, misled, it is said, by the promises of Villiers, duke of Buckingham. Neglected by his patron, he turned his attention to the drama, and, in 1675, produced his tragedy of Nero, and, from that time to 1681, produced a tragedy yearly. He also tried his abilities as an actor, but failed in the attempt. In 1684, insanity rendered his confinement necessary, and he was taken into Bethlehem hospital, where he remained until 1688, when he was discharged, and wrote two more tragedies, the *Princess of Cleves*, and the *Massacre of Paris*, which appeared in 1689 and 1690. He died in 1691 or 1692, in consequence of some injury received in a drunken night frolic. He is the author of eleven plays, all of which were acted with applause; but his natural fire and pathos were buried in a torrent of words, and clouded by a tendency to turgid and bombastic eloquence.

LEE, Ann. (See *Shakers*.)

LEE, Charles, a major-general in the

American revolutionary war, a native of North Wales, became an officer at the age of 11 years. He served early in America, where he commanded a company of grenadiers, at the unsuccessful assault of Ticonderoga, by general Abercrombie, and was wounded. He distinguished himself in 1762, under general Burgoyne, in Portugal. He afterwards wrote on the side of the American colonies, in a contest between them and the ministry, and then entered the Polish service. During his absence, the stamp act passed, and the hostility to it manifested by general Lee rendered him obnoxious to the royalists of the court of Vienna. In the course of two or three years, he wandered all over Europe, until a duel with an Italian officer, in which his antagonist was killed, obliged him to flee; and, in 1773, he sailed from London for New York. The quarrel between Great Britain and her colonies had now assumed a serious aspect, and Lee formed the resolution to espouse the cause of the latter. Travelling through the colonies, he became acquainted with the most conspicuous friends of colonial emancipation, and, though yet a British officer on half-pay, was active in encouraging the Americans to resistance, and in censuring the measures of the ministry. In 1775, Lee received a commission from congress, and immediately resigned the one he held in the British service; at the same time declaring to the secretary of war his readiness to engage in any honorable service for the king, but reprobating the present measures as inconsistent with the liberty of the subject. In the quality of major-general in the continental service, Lee accompanied general Washington to the camp before Boston. In 1776, he was directed by the commander-in-chief to occupy New York, and to defend that city and the North river against the enemy. On his arrival there, Lee set about strengthening the defences of the city, disarming and securing those who were inimical to the American cause, and checking the intercourse subsisting between the British and the townsmen. He was afterwards invested with the chief command in the southern department. His presence in the south inspired a happy ardor and confidence in soldiers and people, while his conduct on the memorable attack of the British upon Sullivan island raised his military reputation. After the discomfiture of the enemy at this fortress, Lee passed into Georgia, where he remained some weeks, employing himself in fortifying the colony,

and chastising the frontier Indians. Congress anticipating a concentration of the British forces, for the purpose of making a powerful effort at New York, Lee was ordered to Philadelphia, and was despatched to the camp at Haarlem, with permission to visit the posts in New Jersey. He reached the army just in time to recommend its extrication from a situation, where, had the enemy used proper diligence in his operations, it would have been completely destroyed. The opinion of Lee induced the council of war to make a precipitate movement during the night, by which they escaped the toils into which they would otherwise have fallen. While marching through the Jerseys to join general Washington, Lee was made prisoner by the English (December 13, 1776), as he lay carelessly guarded, at a considerable distance from the main body, and carried to New York. Washington proposed to exchange for him six field-officers; but general Howe affected to consider Lee as a deserter from the British army, and refused to release him on those terms. Several British officers were confined, and held answerable for the treatment of general Lee. The latter was, however, treated in a manner unworthy of a generous enemy, until the surrender of Burgoyne, October 17, 1787. After that event, he was exchanged. The battle of Monmouth concluded the military course of general Lee. Being directed by general Washington to advance and attack the enemy's rear, he approached very near, but, instead of obeying his instructions, suffered his troops to make a disorderly retreat. The commander-in-chief met him in the flight, and reprimanded him for his conduct. Lee replied in improper language, but executed the subsequent orders of general Washington with courage and ability. Stung with the indignity which he conceived to have been offered him, he wrote two letters to the commander-in-chief, after the action, of a disrespectful tenor, challenging him to substantiate the charges implied in his expressions on the field. General Lee was arrested, and arraigned before a court-martial, for disobedience of orders, misbehavior before the enemy, and disrespect to the commander-in-chief. August 12, 1778, he was found guilty of the charges, and sentenced to be suspended from any commission in the armies of the U. States for the period of one year. The concurrence of congress in this sentence was thought necessary; and, while yet in suspense as to their determination, he published a de-

fence of his conduct. His abuse of general Washington's character, in this pamphlet, led to a duel with colonel Laurens, one of the aids of the commander-in-chief, in which Lee was wounded. Congress confirmed the sentence of the court-martial in his case, though not without previous discussion. Lee retired to an estate he had purchased in Virginia, where he lived, secluded in a small hovel, destitute of glass windows or plastering, amusing himself with his books and dogs. While in this situation, he composed a set of political and military queries, in which his bitter feelings were freely vented, and which were afterwards published in Baltimore, where they created considerable disturbance. In 1782, he went to Philadelphia, where he engaged lodgings in a tavern, and, a few days after his arrival, was seized with a fever, of which he died in obscurity, October 2, 1782. His thoughts would appear to have been employed to the end in the profession which had engaged the best portion of his life, for the last words he was heard to utter were, "Stand by me, my brave grenadiers." From respect to his former services, a large concourse of the people, including many public characters, both French and American, joined in the funeral solemnities.—General Lee was brave in action, of a sound judgment in military affairs, and possessed of the affection of his officers and men. Sensible of his military talents, and insatiably ambitious, he aspired to the chief command, and was little scrupulous about the means to be employed to attain that dignity. Whatever might have been his motives for engaging in the American cause, he sacrificed much for it, and was useful in its advancement. He was a classical scholar, and possessed an excellent memory and a brilliant fancy. His temper was morose and avaricious. His satirical spirit made him many enemies. Though a gentleman in his manners when he chose to appear such, he was often coarse, and, towards the latter part of his life particularly, became very negligent of his personal appearance. He was very fond of dogs, which he even carried into the company of ladies. With all his faults, however, he was distinguished for sincerity, veracity, and adherence to his friends. He was rather above the middle size. His countenance was not agreeable. Many persons considered him an atheist, though some exalted ideas of a Supreme Being appear in his correspondence. He published some essays on military, political and literary subjects, which,

together with his extensive correspondence, were collected in a volume in 1792. A pamphlet which he wrote on American affairs, in the earlier part of his life, was much approved of by the friends of this country, and particularly commended by doctor Franklin. It was his earnest desire, expressed in his will, that he should not be buried in any church or churchyard, or within a mile of any Presbyterian or Anabaptist meeting-house; and he assigned as his reason, that since his residence in America, he had kept so much bad company while living, that he wished to avoid it when dead.—See *Memoirs of Charles Lee* (Dublin, 1792); *Anecdotes of Charles Lee* (London, 1797); *Girdlestone's Facts proving Charles Lee to have been Junius* (Lond., 1813).

LEE, Richard Henry, a signer of the Declaration of Independence, was born Jan. 20, 1732, at Stratford, Westmoreland county, Virginia, and, after a course of private tuition in his father's house, was sent to the academy of Wakefield, in Yorkshire, England, where he became distinguished for his proficiency in the classics. He returned to his native country when about in his 19th year, and, his fortune rendering it unnecessary for him to devote himself to any profession, his time was most usefully spent in the improvement of his mind. The first endeavor which he made to serve his country, was in the capacity of captain of the volunteer companies which were raised in 1755, for the purpose of aiding the expedition under general Braddock. He was disappointed, however, in his patriotic desires, Braddock having refused to accept any more assistance from the provincials than he was obliged to. In his 25th year, Lee was appointed a justice of the peace for his native county—an office then given only to persons of the highest character, and generally but to persons of considerable experience. Not long afterwards, he was chosen a delegate to the house of burgesses, from Westmoreland county, and thus commenced the career of politics, for which he was peculiarly fitted, both by his natural disposition and talents, and the studies in which he was versed. Works of civil and political morality, history, the principles of the civil law, and the laws of his own country, had occupied the principal share of his time, whilst he had not neglected the more elegant departments of polite literature; and he soon obtained distinction in debate. His voice was always raised in support of those principles which were advocated by the republican or anti-aristocratic portion of the legislature; and

when, in 1764, the declaratory act was passed in the British parliament, in pursuance of the right claimed by that body of taxing America, he was the first to bring forward the subject to the notice of the assembly of which he was a member. A special committee having, in consequence, been appointed to draught an address to the king, a memorial to the house of lords, and a remonstrance to the house of commons, Mr. Lee was placed on it, and selected to prepare the two first papers. These, accordingly, proceeded from his pen, and, in the words of his biographer and grandson, "contain the genuine principles of the revolution, and abound in the firm and eloquent sentiments of freemen." In 1765, Patrick Henry (q. v.) introduced in the Virginia legislature his famous resolutions against the stamp act, which had just been passed by the British parliament. Mr. Lee lent Mr. Henry's motion his powerful and most zealous assistance. Not long after it had been carried, in spite of the efforts of the influential party, who advocated the measures of the mother country, Mr. Lee, amongst other methods which he took to prevent the operations of the stamp act, planned and effected an association "for the purpose of deterring all persons from accepting the office of vender of stamp paper, and for awing into silence and inactivity those who might still be attached to the supremacy of the mother country, and disposed to advocate the right of colony taxation." The association bound themselves to exert every faculty to accomplish the end for which they had united together, "at every hazard, and paying no regard to danger or to death." In consequence of the opposition the stamp act encountered in the colonies, the British ministry were forced to repeal it; but they did so with a reservation of the right of the mother country "to bind the colonies in all cases whatever." In 1767, parliament having passed two acts, one laying a tax on tea, and the other requiring the legislature of the colony "to make provision for quartering a part of the regular army," Mr. Lee exerted himself in every way to excite a spirit of hostility to them, perceiving, as he did, their despotic tendency, and feeling, even then, that a struggle for freedom must eventually take place. It would be impossible for us, consistently with our limits, to enter into a minute detail of the unceasing efforts of Mr. Lee's patriotism between this period and the assembling of the first congress in Philadelphia; we can only mention that the celebrated plan

which was adopted in 1773, by the house of burgesses, for the formation of corresponding committees to be organized by the legislatures of the several colonies, and also that of corresponding clubs or societies, among the "lovers of liberty" throughout the provinces, for the purpose of diffusing amongst the people a correct knowledge of their rights, of keeping them informed of every attempt to infringe them, and of rousing a spirit of resistance to arbitrary measures,—both originated with him. The same idea had, about the same time, been conceived and proposed by Samuel Adams in Massachusetts—a circumstance which has occasioned a dispute concerning the merit of having given birth to measures which were the forerunners of the general congress. It cannot be doubted, however, that Mr. Lee followed only the suggestions of his own mind with regard to the proposal, as, several years before, in 1768, he had requested Mr. Dickinson of Pennsylvania, in a letter, to bestow his consideration upon the advantages of plans which he communicated to him of the same purport. In 1774, the first general congress assembled at Philadelphia, and Mr. Lee attended it as one of the Virginia delegation. His labors during this session, as throughout his whole congressional career, until his zeal and activity were partially arrested by bodily infirmities, were unremitting. Of all the leading committees—those to prepare an address to the king of England, to the people of Britain, and to the colonies, and those to state the rights and grievances of the colonies, and to carry into effect the resolution of non-intercourse with Great Britain—he was a member; and from his pen proceeded the memorial of congress to the people of British America. In the following year, he was unanimously elected, by the people of Westmoreland county, to the assembly of Virginia, by which he was sent to the second congress. At this period, hostilities were in full operation between the two countries, and one of the first acts of the new congress was to invest George Washington with the command of its armies. His commission and instructions were furnished by Mr. Lee, as chairman of the committee appointed for that purpose. The other committees on which he served in this session, were those named to prepare munitions of war, to encourage the manufacture of saltpetre and arms, and to devise a plan for the more rapid diffusion of intelligence throughout the colonies. The

second address of congress to the people of Great Britain—a composition unsurpassed by any of the state papers of the time—was written by him this session. But the most important of his services, in this second congressional term, was his motion, June 7, 1776, “that these united colonies are, and of right ought to be, free and independent states; that they are absolved from all allegiance to the British crown; and that all political connexion between them and the state of Great Britain is, and ought to be, totally dissolved.” His speech on introducing this bold and glorious measure, was one of the most brilliant displays of eloquence ever heard on the floor. After a protracted debate, it was determined, June 10, to postpone the consideration of this resolution until the first Monday of the ensuing month of July; but a committee was ordered to be immediately appointed to prepare a declaration of independence. Of this committee he would have been the chairman, according to parliamentary regulations with regard to the original mover of an approved resolution; but he was obliged, on the same day (the 10th), to leave congress, and hasten to Virginia, in consequence of the dangerous illness of some of the members of his family. Mr. Jefferson (q. v.) was substituted for him, and drew up the declaration. In August following, Mr. Lee returned to his seat in congress, which he continued to occupy until June, 1777, pursuing, with unabated ardor, the path which was to lead to the freedom and happiness of his country. In that month, he solicited leave of absence, and returned to Virginia. This step was taken on account of the delicate state of his health, and also for the purpose of clearing his reputation from certain stains which malice or over-heated zeal had thrown upon it, which he effectually did, by demanding an inquiry into the allegations against him, from the assembly of his native state. The result of this inquiry was a most honorable acquittal, accompanied by a vote of thanks to him for the fidelity and zeal of his patriotic services, which the speaker of the house, the venerable George Wythe, in communicating it to him, prefaced by a warm and flattering eulogy. In August, 1778, he was again elected to congress, but was forced, by his declining health, to withdraw, in a great degree, from the arduous labors to which he had hitherto devoted himself. In 1780, he retired from his seat, and declined returning to it until 1784. In the interval, he served in the as-

sembly of Virginia, and, at the head of the militia of his county, protected it from the incursions of the enemy. In 1784, he was chosen president of congress by a unanimous vote, but retired at the end of the year, and, in 1786, was re-elected to the Virginia assembly. In the convention which adopted the present constitution of the U. States, Mr. Lee joined in the vote of congress which submitted the plan they proposed to conventions of the people of the states. He was, however, hostile to it himself, thinking that it had too great a tendency to consolidation. When it was adopted, he and Mr. Grayson were chosen the first senators from Virginia under it, and, in that capacity, he moved and carried several amendments. In 1792, his health forced him to retire from public life, when he was again honored by the Virginia legislature with a vote of thanks. He died June 19, 1794.

LEE, Francis Lightfoot. (See *Appendix* to this volume.)

LEE, Arthur, a distinguished revolutionary patriot, was born in Westmoreland county, Virginia, December 20, 1740. He was the youngest of five brothers, all of whom became eminent. He was sent to the school at Eton, in England, and, upon the completion of his course there, entered the university of Edinburgh, where he commenced the study of medicine, and took his degree of M. D. with great distinction, winning a medal for the best botanical treatise, which was published by order of the university. Having travelled through Holland, Germany, Italy and France, doctor Lee returned to Virginia, and commenced the practice of his profession at Williamsburg, then the metropolis. His success was great; but the bent of his mind to politics determined him, before long, to return to England, and study law, in order that he might acquire familiarity with the science of politics and government, and fit himself for taking a part in public affairs, which were then beginning to wear a highly interesting and serious aspect. Before his return, he had heard the parliamentary debate on the stamp act, and, when the duty bill was passed, he wrote a series of anonymous papers in relation to it. In 1776, he went again to London, which city he found the stronghold of popular opposition, and the society of the supporters of the bill of rights the most active in conducting it. Of this society he became a member, with the design of connecting the grievances of the two nations, and purchased the freedom of the city, which qualified him to vote in muni-

cial affairs. The complaints of America were introduced into the famous Middlesex petition by Mr. Lee, associated with Wilkes; and he also successfully proposed a resolution, that the members of the club would support no candidate for parliament who would not pledge himself to promote the granting of the power of self-taxation to America. The celebrated Junius was an adviser of this body, and with him Mr. Lee had an amicable discussion on some points of American policy, about which they happened to differ. His political publications at this period—in which he adopted the signature of *Junius Americanus*—were numerous, and procured for him the acquaintance of Burke, doctor Price, and others of the popular leaders. In 1770, he was admitted to the bar, and began the practice of his new profession under the most favorable auspices; and such success attended his exertions as to enable him to lay the foundations of an ample fortune. In the same year, the assembly of Massachusetts appointed him their agent, in case of the absence or death of doctor Franklin; and before either of the contingencies occurred, he assisted the venerable sage with his hearty coöperation. As a testimony of the sense of his services, that state subsequently, in 1784, presented him with a tract of land containing 4000 acres. In the spring of 1774, he set out on a tour to France and Italy, and, when at Paris, published an Appeal to the People of Great Britain. Hearing, however, of the dissolution of parliament, before he had completed his journey, he hastily returned from Turin to London. On the return of doctor Franklin to America, in the same year, he became the sole agent of Massachusetts. The secret committee of congress appointed Mr. Lee their London correspondent. The principal object of this regulation was, to learn what was to be hoped from the European powers. Mr. Lee directed his inquiries particularly to the French ambassador at the British court, through whom he obtained assurances from the count de Vergennes, that his government would secretly furnish to the colonies £200,000 worth of arms and ammunition, to be transported from Holland to the West Indies. He was afterwards appointed by congress one of the commission to the court of France, in conjunction with Silas Deane, to whom doctor Franklin was afterwards added, and continued to labor unceasingly for the cause of his country, by his writings, negotiations, and never-failing vigilance in detecting what-

ever might prove injurious to its interests. At the same time, he also acted as agent for Virginia, and had the address to procure, under circumstances of special favor, from the royal arsenal, warlike stores to the amount of nearly £260,000. In December, 1777, congress appointed him sole commissioner to Spain, still retaining him on the commission to France. The British ambassador remonstrated against his reception, in consequence of which he was detained at Burgos, on his way to Madrid; but, upon sending a spirited reply to the remonstrance, no further interruption was attempted, and he proceeded to the capital. He there pursued the same policy which he had practised in London and Paris, ingratiating himself and his cause with the men of influence, and appealing boldly and directly to the government, from which he finally procured a large pecuniary loan. Having accomplished all that seemed practicable, he returned to Paris; when, the commissioners having determined on the expediency of conciliating Frederic of Prussia, and prevailing with him to withhold his assistance from England, Mr. Lee was selected for that duty, and repaired to Berlin, where he was allowed to reside in a private character, and to correspond secretly with the court. He succeeded in obtaining from Frederic an assurance that he would afford no facilities to Great Britain, in procuring additional German auxiliaries, and that he would prohibit the passage, through any part of his dominions, of any troops which that court should thenceforward engage in Germany. He obtained, also, permission for the citizens of the U. States to carry on a direct commerce with the subjects of Prussia, and for himself to purchase, for the use of the U. States, arms from the armories from which the king supplied his forces. While in Berlin, his papers were stolen from his chamber; but, upon an order from the king to investigate the affair, they were secretly returned. The blame of this act he cast on the British envoy, who, on the representation of the Prussian monarch, was recalled. When Mr. Lee left Berlin, it was with an understanding that a correspondence should be carried on between baron Schulenburg and himself, on the affairs of the U. States, and that he should keep the king constantly informed of the events of the war with Great Britain, which he did during his residence in Paris. He was also assured that Prussia "would not be the last power to acknowledge the independence of his

country." In forming the commercial treaty with France, Mr. Lee objected to two articles, in which it was stipulated that no duties should be charged by the respective governments on any merchandise exported to the French West Indies, which yielded molasses, or on the molasses exported thence to the U. States; and, on the suggestion of France, the decision was left to congress, who directed that they should be expunged. Upon the recall of Mr. Deane, between whom and Mr. Lee there had been some misunderstanding, John Adams was appointed in his place. Their services, however, were soon afterwards superseded by the appointment of doctor Franklin as minister plenipotentiary. During the period of his commission, the peculations of the subordinate agents, who were employed to conduct the commercial details of the public business, had excited the vigilant inspection and unsparing reprehension of Mr. Lee. This interference created a multitude of complaints and insinuations, which were artfully disseminated at home. These rumors were, in a measure, successful in exciting the suspicions of some members of congress; and when, in 1779, it was determined to send a minister to Spain,—and Mr. Lee was certainly so prominent a character as to be at once suggested as the fittest candidate,—he was not appointed, although nominated. Upon learning his virtual censure, he resigned his appointments, and returned to America in 1780. He prepared an elaborate report of his official proceedings, and answers to all the charges which had been circulated to his prejudice; but, upon requesting leave to vindicate himself with these in congress, that body expressed their full confidence in his patriotism, asserting that they had no accusations to make, and requested him to communicate his views and information acquired during his residence abroad. In 1781, he was elected to the assembly of Virginia, and by it returned to congress, where he continued to represent the state until 1785. In 1784, he was sent on a delegation to make treaties with the Indians on the northern frontier. He was next called to the board of treasury, with Samuel Osgood and Walter Livingston, in which he continued from 1784 to 1789. Within that period, he also served in a legislative committee to revise the laws of Virginia. On the dissolution of the treasury board, he once more sought the shades of retirement, and established himself on a farm on the Rappahannock, where he died Dec. 12, 1792.—See R. H. Lee's *Life of Ar-*

thur Lee (Boston, 1829), and the review of the same in the *North American Review*; also his letters in Sparks's *Diplomatic Correspondence of the Revolution* (Boston, 1831).

LEE, Henry, general, a distinguished officer of the revolution, was born in the colony of Virginia, Jan. 29, 1756, of a highly distinguished family. He received the rudiments of his education from a private tutor, and was then sent to Princeton college, where he was graduated in the 18th year of his age. In 1774, soon after his return home, he was intrusted with the management of all the private concerns of his father, whilst the latter was engaged in negotiating a treaty with some Indian tribes on behalf of the colony, and, in the execution of this charge, he displayed a degree of prudence, industry and ability beyond his years. In 1776, he was appointed a captain of one of the six companies of cavalry, raised by Virginia, after she had thrown off the authority of the mother country. About this time, the large armies sent by Great Britain into America rendered it indispensable that every possible reinforcement should be sent to general Washington, and, in consequence, those companies were incorporated into one regiment, under the command of lieutenant-colonel Bland, and offered by Virginia to congress. Their services were accepted, and, in September, 1777, they joined the main army of the provincials. Young Lee was thus afforded an opportunity of winning distinction, which he quickly did. He maintained a strict system of discipline, and was extremely careful of his men and horses, by which he was enabled to move with celerity, and strike the enemy by surprise, with certainty and success. He particularly attracted the notice of Washington, who, at the battle of Germantown, selected him, with his company, to attend as his body-guard. In January, 1778, the enemy formed a plan to capture him. Two hundred of their cavalry succeeded in approaching his quarters, a stone house, unperceived, at a time when his troopers were dispersed in search of forage. There were only ten men with him, most of them officers; but, with these, he defended the house obstinately, and the assailants were constrained to retreat. In consequence of this and other exploits, he was, shortly afterwards, promoted by congress to the rank of major, with the command of a separate corps of cavalry, consisting of three companies, to which both cavalry and infantry were subsequently added. In 1780 he was sent, with his legion, to

the army of the south, under general Greene, having been previously raised to a lieutenant-colonelcy, and continued with it until the end of the war. In the famous retreat of Greene, before Cornwallis, into Virginia, Lee's legion formed the rear-guard of the American army, and repelled every attempt of the enemy to impede its march. After Greene had effected his retreat to a place of safety, he sent Lee and colonel Pickens into North Carolina, to watch and interrupt the movements of Cornwallis, intending to return himself into that state, and bring the British general to battle. While the two colonels were marching to surprise Tarleton, Lee fell in with a couple of messengers sent to this British officer from colonel Pyle, the commander of a body of 400 American royalists. The messengers mistook Lee for Tarleton, as the accoutrements of his troopers were similar to those of the British officer, and communicated to him full information concerning Pyle's movements. Availing himself of the mistake, Lee personated Tarleton, and sent one of the messengers to Pyle, with directions for him to take post at a certain station, where he and Pickens soon after came up with him, and dispersed his force. At the battle of Guilford court-house, which happened soon afterwards, Lee eminently distinguished himself. He was placed, with his legion, on the left of the front line of Greene's army, and, although the North Carolina militia, the principal force attached to their position, abandoned them at the very commencement of the action, they yet contrived to keep the enemy at bay, until the order to retreat was given by the American general. Previous to the battle in the morning, Lee encountered the cavalry of Tarleton, and drove them back with considerable loss. During the interval between this battle and that of Camden, in which Greene was worsted by lord Rawdon, Lee took several forts. After the latter engagement, he was sent to aid Pickens in the capture of Augusta, in Georgia, and, in his way thither, surprised and took fort Godolphin, in which there was a valuable deposit of the enemy's military stores. On his junction with Pickens, they immediately invested fort Cornwallis, on which the fate of Augusta depended, and soon forced it to surrender. Its commander was colonel Brown, who was particularly obnoxious to the Americans; and his life would have been a sacrifice to their hatred, had it not been for the precautions of colonel Lee. He then returned, with his prisoners, to

the army of Greene, who was, at that time, besieging the fortress of Ninety-Six. In that siege Lee had a conspicuous share, and, in the attempt made to take the place by storm, he was charged with the attack in one quarter. He was completely successful; but, the other assault having been less fortunate, the siege was raised. In the action which, a short time subsequently, occurred at Eutaw springs, Lee was also conspicuous, acting at the head of his infantry. By opportunely dismounting his cavalry, he greatly contributed to the enemy's defeat. In the ensuing month of October, he was sent by Greene on a special mission to the commander-in-chief, then employed in the siege of Yorktown, for the purpose of requesting him to prevail on the count de Grasse to afford naval assistance, to enable Greene to lay siege to and take Charleston, with the British army, in the south. He arrived at Yorktown about the time of the surrender of Cornwallis, and, after executing his commission, returned to Greene. Near the end of the war, he married. In the fall of 1786, he was appointed a delegate to congress from the state of Virginia, in which station he remained until the present constitution of the U. States was carried into operation. In the interim, he was elected a member of the convention of Virginia, which met in June, 1788, and ratified that constitution, of which instrument he was a strenuous and eloquent advocate. He was afterwards chosen a member of the house of delegates of his native state. In 1792, he retired from his seat in the assembly, on being raised to the chair of governor, which he filled for three successive years. In the last of them, he was named by president Washington to command the forces which he was constrained to send into the western counties of Pennsylvania, in order to quell the disturbances by which they were agitated. He performed this duty in the most satisfactory manner. In 1799, he was again chosen a member of congress, and, while there, in the same year, he was selected to pronounce a funeral eulogium upon Washington. He retained his seat until the accession of Mr. Jefferson to the chief magistracy of the Union, when he retired into private life, after which he never held any conspicuous office. The latter years of his life were distressed by pecuniary embarrassments, occasioned, in a measure, by his generous hospitality. It was while he was confined, in 1809, within the bounds of Spottsylvania county, on account of pecuniary obli-

gations, that he prepared for publication his excellent memoirs of the southern campaigns, in which he bore so conspicuous a part—a work which, if not remarkable for great polish of style, is entitled, from its bold, manly and sincere tone, as well as the power of the descriptions, and the interest of the information, to rank with the best works relating to the revolutionary war.—General Lee happened to be in Baltimore, in 1814, when the printing-office of an obnoxious paper was threatened by the populace. He was induced, by personal friendship, to take part in the defence of the house. In the dreadful attack which was made on the Baltimore jail, to which the party of defenders were carried for safety, he was severely wounded. His health decayed in consequence, and he repaired to the West Indies, hoping to stop the ravages of disease. In 1818, he returned to the U. States, and died March 25 of that year, on Cumberland island, near St. Mary's, Georgia.

LEECH (*hirudo*, Lin.) ; a genus of molluscous animals, which have an oblong body, a mouth surrounded by a lip, and a disk at the posterior extremity, by both of which they can affix themselves to bodies. In the mouth are three small jaws, tongues, or plaits of skin, by which they are enabled to extract the blood of other animals, that forming their principal nourishment. Leeches are hermaphrodites, and some species are viviparous. They occur in ponds and streams, in almost all countries. They derive their principal interest from the use made of them as a remedial agent, which, however, has been too much neglected in the U. States. There are several of the species which are capable of being thus used, though it is commonly supposed that only two sorts are proper. The employment of leeches in France may be judged of from the circumstance, that the hospitals of Paris require an annual supply of several hundred thousands. In Philadelphia, the supply required is from 150,000 to 200,000. As regards the other cities of the U. States, we have no certain information, though to the south their use is very limited. The leeches employed in Philadelphia are usually procured in the U. States, though there is an importation of them every year from Europe ; but they are too expensive for general use, costing from 40 to 50 cents each. The American species does not draw as much blood as the foreign, which are calculated, on an average, to detract one ounce each, whilst the majority of the American do not take more than from two to three

drachms each. The leech, when forcibly pulled away whilst sucking, is very apt to leave the teeth, or plaits of skin, spoken of above, in the wound, occasioning pain and inflammation of the part ; the leech is also rendered incapable of again biting. The most certain method of inducing these animals to bite, is to cleanse the skin thoroughly : the leeches should be exposed to the air for a short time previous to their application, as by this means they will bite more freely. If they are voracious, they may be applied to the part by being held lightly in the fingers, or they may be placed in a cup which is to be inverted over the part from which the blood is to be drawn. They should not be disturbed whilst sucking, nor the patient be exposed to too great warmth, or they will fall off ; this they should always be permitted to do of their own accord. They are made to disgorge, by putting them in a weak solution of common salt ; and, if they have not been injured, they may be used five or six times. They are taken either by hand or by means of a gauze net. In keeping them, great care should be taken to renew the water frequently, and not to place too many in the same reservoir, and to remove speedily all that may die. Notwithstanding every precaution that can be taken, they will sometimes perish in great numbers, apparently from an epidemic disease. It appears that, in such cases, the use of charcoal is the preventive : for this purpose, the bottom of the reservoir is to be strewn with small pieces of this substance, kept down by moss. (See Derheim's *Hist. nat. et med. des Sangsues* ; *North Am. Med. and Surg. Jour.*, 1826, &c.) In 1821, France is said to have exported 1,500,000, and in 1829, 33,650,000.

LEEDS ; a large trading and manufacturing town of England, West Riding of Yorkshire, the principal seat of the woolen trade, and one of the largest as well as the richest and most populous towns in the northern part of the kingdom. It is situated on the Aire, which is navigable from the Humber up to the town, whence the Leeds and Liverpool canal proceeds on the other hand to the west, so that it is equally open to the eastern and western seas. Along the river, the town extends about two miles from east to west. The houses, mostly of brick, are in general well built, and, in the modern part of the town, which is daily extending, handsome and elegant. In the other parts, the streets are narrow, crooked, and in some places dirty. It has eight churches and 20 dis-

senting chapels. Of the manufactures and trade of Leeds and the vicinity, the staple article is woollen cloth. There are also several manufactories for spinning flax for canvass, linen, sacking, thread, &c. Here are likewise manufactories for flat and green glass, and for fine and coarse pottery goods. Several founderies have been erected; and there is a large manufactory for steam-engines. The borough of Leeds sends no member to parliament. Population in 1821, 83,796, now increased to nearly 100,000. The parish of Leeds is nearly co-extensive with the borough, and is about 30 miles in circumference. Lon. 1° 34' W.; lat. 53° 48' N.

LEEK (*allium porrum*); a mild kind of onion, much cultivated and highly esteemed in some places for culinary purposes. The stem is rather tall, and the flowers are disposed in large compact balls, which are supported on purple peduncles.

LEEWARD ISLANDS. The terms *Leeward* and *Windward*, applied to the West India islands, were given them from their situation in a voyage from the ports of Spain to Carthagena or Porto Bello. The islands, which lie to leeward, extend from Porto Rico to Dominica.

LEEWARD, To, denotes towards that part of the horizon which lies under the lee, or whither the wind blows.

LEFEBVRE, François Joseph, duke of Dantzic, marshal and peer of France, &c., born at Rufack, department of the Upper Rhine, in 1755, after having served with distinction in the wars of the republic and the empire, died in 1820. He entered the military service in the *gardes Françaises*, and at the beginning of the revolution was sergeant. Having warmly embraced the new principles, and distinguished himself by his prudence and firmness, his promotion was rapid. In 1794, he was made general of division, and, in the succeeding campaigns, continued to render himself conspicuous by his courage and military skill. He espoused the cause of general Bonaparte, whose designs he was able to forward on the 18th Brumaire, as he had, at that time, the command of the 17th military division, which included Paris. His services on this occasion were rewarded by the dignities of senator, marshal of the empire, grand cross of the legion of honor. He bore an important part in the victory of Jena, distinguished himself at Eylau, and received the chief command at the siege of Dantzic, at which he gave the most brilliant proofs of genius and humanity. In 1808, he served in Spain;

in 1809, again in Germany; and, in the Russian campaign, commanded the imperial guard. After the abdication of the emperor, the king created him peer, and, during the hundred days, Napoleon included him in his upper chamber. His name was consequently erased after the second restoration; but, in 1819, he was again summoned to take his seat.

LEFEVRE, Robert; a portrait painter in Paris; a pupil of Regnault. He produced also historical pieces of great merit, which, with those of David, Girodet, Guerin and Gerard, belong to the best of the modern French school. Several portraits of Napoleon by Lefevre are among the best. He died in 1831.

LEFORT, Francis James, the celebrated favorite of Peter the Great, was born at Geneva, 1656. His father, a merchant in that place, sent him to Hamburg to become acquainted with commerce; but, having an inclination for a military life, he went secretly to Marseilles, in his 14th year, and entered first the French and afterwards the Dutch service, which he left to go to Moscow, by the way of Archangel, in 1675. Here he became secretary to the Danish ambassador; and a fortunate accident gave him an opportunity to gain the favor of the young czar, Peter Alexievitch, which he retained till his death. In both was the germ of greatness, which was gradually developed. Peter felt that he needed an instructor and assistant; and Lefort possessed talents fitted for both offices. The first great service which he rendered the czar was in a rebellion of the Strelitz (1688). Lefort quelled the insurrection, and saved the prince from the danger which threatened his life. This service gained for him the unbounded confidence of the czar, who was now become the absolute master of Russia. Lefort's influence increased daily. He established the military system of Russia, and laid the foundation of her navy, which Peter afterwards carried to such a degree of perfection. When Peter travelled into foreign lands, in 1697, Lefort was the principal of the embassy, in the train of which the czar remained incognito. In the mean time, the nobles, jealous of the favor shown to a foreigner, saw a favorable opportunity to revenge themselves, in the long absence of Lefort and the czar. The Strelitz rebelled; but Peter darted on them with the rapidity of an eagle, and took a bloody revenge. The czar, Lefort and Menzikoff executed the guilty with their own hands. Soon after, Lefort died (1699). He had a comprehensive and

cultivated mind, a penetrating judgment, much presence of mind, great dexterity in sounding those of whom he wished to make use, and an uncommon knowledge of the resources of the Russian empire. The groundwork of his character was firmness, invincible courage and justice; but his habits were irregular, which hastened his death.

LEGATES, with the ancient Romans, were the assistants of a proconsul or propretor, in the administration of a province and in the command of the army; also the higher officers, who commanded under the general-in-chief of any army. Of the papal legates, there are several kinds. *Legatus natus* is a mere title connected with an episcopal see, by the grant of the pope. These sees lie out of the Roman states; among them are those of Treves, Cologne, Salzburg. The real envoys are called *legati missi*. Among them, the *legati a latere* have the highest rank, and are sent on particularly important missions to the principal courts, or into the provinces of the papal dominions as governors. They are taken from the college of cardinals only. The districts of the States of the Church, therefore, are called *legations*. Legates who are not cardinals are called *nuntii apostolici*. If they are sent *cum facultate legati a latere*, their power is equal to that of a *legate a latere*. All Catholic governments, however, do not allow them equal authority. Thus the Austrian expressly prohibits any clergyman from transacting business with the pope through the legate.

LEGATION is used to signify the body of official persons attached to an embassy; hence *secretary of legation*. (See *Ministers, Foreign*.) *Counsellor of legation* is a title bestowed in Germany—the land of counsellors—on certain officers connected with the ministry for foreign affairs. Very often, however, it is a mere honorary title, conferred upon persons who never had any connexion with politics, as Jean Paul Richter, who was made counsellor of legation, by one of the petty princes. *Legation* also signifies a division of the States of the Church. (See *Legate*.)

LEGATO (*Ital.*); a word used in opposition to *staccato*, and implying that the notes of the movement or passage to which it is affixed are to be performed in a close, smooth and gliding manner, holding each note till the next is struck.

LEGEND (*legenda*); the title of a book containing the lessons that were to be read daily in the service of the early Ro-

man Catholic church. The term *legend* was afterwards applied to collections of biographies of saints and martyrs, or of remarkable stories relating to them, because they were read at matins, and in the refectories of cloisters, and were earnestly recommended to the perusal of the laity as proofs of the Roman Catholic faith. The Roman breviaries likewise contain histories of the lives of saints and martyrs, which were read on the days of the saints whom they commemorated. They originated in the twelfth or thirteenth century, and they contributed much to the extinction of the old German (heathen) heroic traditions. In the middle ages, a collection of the lives of the saints was known by the name of *Legenda Sanctorum*, or *Historia Lombardica*. There is a celebrated collection, called the Golden Legend (*Aurea Legenda*), by Jacobus de Voragine, archbishop of Genoa, who died in the year 1298. The histories of saints, which are founded merely on tradition, are also known by the name of *Legends*. (See Baillet's historical and critical treatise on the histories of the saints and martyrs, in his work entitled *Les Vies des Saints*.) As these histories were often nothing more than pious fictions, the name of a *legend* was given by the incredulous to all fables of a similar nature, to all fictions which make pretensions to truth. Valerius Augustinus, who was bishop of Verona in the sixteenth century, in his work *De Rhetorica Christiana*, ascribes the numerous fables, which have been ushered to the world under the title of *legends*, in part to the custom prevailing, in many monasteries, of requiring the monks to write Latin paraphrases and dissertations on the most striking circumstances in the lives of the saints, in which they were allowed to ascribe to tyrants and persecuted saints such works and actions as they considered most adapted to their situation and character. This gave rise to those embellishments of history, which were preserved, and afterwards found in monasteries, and mistaken for true histories. Although many of the legends are tasteless and unmeaning fictions, the offspring of childish credulity, or intended to gratify it, there is also a large number of highly poetical and ingenious fables among them. Hence many poets have attempted to avail themselves of these rude materials, and to arrange them in the modern taste; and hence every poetical fiction, in the style of ecclesiastical tradition, whether in verse or prose, is called a *legend*. The principal characteristic of a legend is the miraculous,

which should be of a religious nature, or relating to some traditions of the church, without, however, falling into frivolity. The legend is a production of Christianity, and, like the traditions of the church, wholly different from the *mythos*, or ancient fable. The style proper to it is plain and simple, such as would naturally flow from the gentle inspiration of a pious heart, and wholly inconsistent with ornament and poetical decorations.

Legend is also used for the motto or words engraved, in a circular manner, round the head or other figure upon a medal or coin. The meaning of this term is similar to that of *inscription*; but the latter refers chiefly to the writing placed in the middle of the coin, while the legend, as we have just observed, surrounds it.

LEGENBRE, Adrian Marie; professor of mathematics at the military school in Paris. In 1787, a dispute having arisen between the English and French astronomers respecting the exact situation of the observatories of Paris and Greenwich, Legendre, together with Cassini and Mechain, was appointed by the French government to measure a degree of the meridian between Dunkirk and Boulogne, whilst the English mathematicians performed the same operation in another place. The results were published by the French *savants* in 1792. Two years after, Legendre published a *Mémoire sur les transcendentes Elliptiques*, and his *Éléments de Géométrie*, which has since passed through eleven editions, has been translated in the U. States, and is universally considered a classical work. Legendre has made very important and profound researches respecting the attraction of elliptic spheroids, and has the glory of having been the first to prove that the ellipse is the only form that can preserve the equilibrium of a revolving liquid mass, and that the particles of the mass attract each other according to the square of their distances. This inquiry, which he began in 1782, was followed by another, not less important, on the relation of spheroids to each other. At a later period, in conjunction with Prouy, he calculated the new trigonometrical tables for the decimal division of the circle. In 1808, Legendre was appointed president of the university for life; in 1815, honorary member of the committee for public instruction; and in 1816, with Poisson, examiner of the candidates for the polytechnic school. Among his most important works are—1. *Nouvelle Théorie des Parallèles* (1803); 2. *Nouvelles Méthodes pour la Détermination des*

Orbites des Comètes, &c. (1805); 3. *Essai sur la Théorie des Nombres* (1798, with a supplementary volume, which appeared in 1816, in 4to.); 4. *Exercices de Calcul intégral* (1807, 4to.). The memoirs of the academy, of which he is a member, also contain valuable contributions from him. His method for the determination of the orbits of comets has been much admired for its profoundness and ingenuity. In 1824, Legendre, then 72 years old, was deprived of his pension of 3000 francs, because he would not vote for the ministerial candidates for the academy.

LEGHORN (*Livorno*); a commercial city in Tuscany, on the Mediterranean; lat. 43° 33' 5" N.; lon. 10° 16' 53" E. The streets are even and well paved, but narrow and dark, from the height of the houses, which are of stone: there are, however, no palaces, like those in the other towns of Italy. The finest street is the *strada Ferdinanda*, which passes through the middle of the town to the port, through the *piazza d'armi*. The town occupies but a small space in proportion to its population, contains seven churches, one archducal palace, one Greek, one Armenian church, and 65,355 inhabitants, amongst whom are about 20,000 Jews in a separate quarter of the town, who possess a beautiful synagogue, two schools, a library, a printing-office, several collections, and many privileges. Greeks, Armenians, and Turks (who have a mosque), are also found here. There are large magazines of salt, tobacco and oil. In the neighborhood of the town is an excellent quarantine establishment with three lazarettos. The coral works produce 160,000 dollars yearly. There are also distilleries of rosoglio, tanneries, dyeries, paper and tobacco manufactories. The port is annually visited by more than 4000 ships. A packet sails between this place and Marseilles. Leghorn is the principal commercial town of Italy, and has an extensive trade to the Levant. The principal commercial nations have consuls at Leghorn. Commerce is principally in the hands of foreigners, particularly the English. The Armenians and Jews are the general brokers of all nations. Much commission business is carried on, and there are large dealings in bills of exchange. Since 1633, it has been an important commercial place. The town, which was till then insignificant, was at that time enlarged. The port is protected by two strong towers situated on rocks in the sea, and by an old castle. It is liable to become choked, and has not sufficient depth for large

ships; these, therefore, have to anchor outside the mole which protects the harbor. This is 600 paces in length, is well paved, and used for riding. On the place before the inner port is the colossal marble statue of the grand-duke Ferdinand III. From thence a bridge leads to the outer port, where the greater number of vessels are at anchor. Without the port, on a rock in the sea, is a lighthouse. Good water for drinking is brought from Pisa, to which little vessels go daily, drawn by men or horses. Between the town and the surrounding suburbs is a long promenade, called *gli Sparti*. The mole, the *piazza d'armi*, the road to Monte Nero, a place of pilgrimage, also serve as public promenades. In 1279, Leghorn was still an open town. When the port of Pisa was destroyed, the prosperity of Leghorn increased, particularly when it passed to Florence in 1421 and 1495. Alexander of Medici made it a strong-hold, and built the citadel. Cosmo I declared the port a free port. From this time forward, the wealth of Leghorn has increased (interrupted only by the wars of the revolution, and, in 1804, by the yellow fever). The society of arts and sciences there established is called *Academia Labronica*.

LEGIO FULMINATRIX (*the thundering legion*). This term was applied to a Roman legion in the time of the emperor Aurelius. The following account of the name is given by the Christian traditions. After the expulsion of the Marcomanni and Quadi from Hungary, the emperor Marcus Aurelius, pursuing these German tribes with a detachment of his forces, A. D. 174, was shut up in a valley, surrounded on every side by high mountains. To those who were thus cut off from the main body of the army, the heat and the want of water were no less dangerous than the attacks of the enemy. In this crisis, a sudden shower of rain reanimated the Roman soldiers. At the same time, a storm of hail, attended with thunder, assailed the enemy, who were now easily repulsed and conquered. Both heathen and Christian authors agree in their relation of the principal circumstances of this event. The adherents of each religion saw in it the influence of the prayers of their brethren. According to Dio Cassius (*Excerpta Xiphilini*, l. lxxi, cap. 8), the miracle was wrought by an Egyptian sorcerer in the train of the emperor; according to Capitolinus (*Vita Marc. Aurcl.*, cap. 24), it was the effect of the emperor's prayers; but, according to Tertullian (*Apologct.*, cap. 5, *Ad Scopul.*, cap. 4) and

Eusebius (*Hist. Eccles.*, l. V, cap. 5), it was brought about by the prayers of the Christians in his army; hence the legion to which these Christians belonged was denominated *fulminatrix*. The letter of the emperor Marcus Aurelius, commonly printed in Greek in the first apology of Justin Martyr, gives the same account with the Christian writers; but it is spurious. The marble pillar erected at Rome in honor of Marcus Aurelius, and still standing, represents this deliverance of the Roman army, the Roman soldiers catching the falling rain, and a warrior praying for its descent. It is not, however, to be considered as a memorial of any influence exercised by the Christians in the event.

LEGION; a division of the Roman army. Under Romulus, it was composed of 1000 foot and 100 horse, selected from each of the three tribes. The body thus selected (hence the name *legio*) amounted, therefore, to 3300 men. In the time of Polybius, a legion consisted of 4200 men, and it was finally increased to 6200 foot. All the soldiers of a legion were Roman citizens: no slaves were admitted, except in cases of the most pressing necessity; nor any citizen under 17 years old, except in peculiar circumstances of danger. There was commonly an equal number of auxiliaries attached to each legion, so that, in the later periods of Roman history, we must understand by a *legion*, a corps of 9000 or 10,000 men. The foot of each legion, when it consisted of 3000 men, were divided into 10 cohorts, and each cohort into three companies (*manipuli*) of 100 each, hence called *centuriae*. When the legion was enlarged, the same division was still retained, with the difference that each *manipulus* was now divided into two centuries, and each century into ten *decuriae*. The commander of a legion was styled the *legatus*. Sometimes, instead of a legate, six military tribunes were appointed from each, who commanded in succession, each for the space of a month, under the direction of the consul. The principal standard of a legion was a silver eagle; and the legions were named from their commander (as the *Claudian legion*), or from the place where they were stationed, or from some deity, or from birds, or from some remarkable event. In the time of Augustus, the army consisted of 25 legions. *Legion* is also used, proverbially, to signify a large and indefinite number of persons or things. This term was revived in the time of Napoleon, and has since been commonly applied to a body of

troops of an indefinite number, and usually of different kinds. Such legions were mostly formed at the beginning of a war, and dissolved at the close. Of this sort were the English-German legion, and the Russian-German legion, in the last war for the independence of Europe. The French national guards were divided into legions and cohorts. After the dissolution of the army raised by Napoleon in 1815, the remains of which had retired beyond the Loire, the new French army was divided into legions, which were named from the departments. This arrangement, however, was abolished towards the close of the year 1820.

LEGION OF HONOR (*légion d'honneur*); an order instituted by Napoleon, while consul, May 19, 1802, for military and civil merit. The proposition produced much debate in the legislative body, and passed after a strong opposition. It was the object of Napoleon to kindle a spirit of ambition, the most necessary national element for the support of wars, of which he foresaw that it would be necessary for him to wage many, and for this purpose the institution was admirably calculated. At the same time, it cannot be denied that, abstractly considered, it is to be regretted, that a nation, which had just declared itself so loudly for liberty, should appear so eager for ribands—an invention of those very times against which the revolution was directed. Moreau, who was altogether opposed to Napoleon, ridiculed the institution. The cross of the legion of honor was given to all who had previously received a military weapon as a mark of honor, and to a great number of new members. Its effect upon the soldiers was very great. After Napoleon's assumption of the imperial dignity, the statutes received some modifications. The oath was originally as follows: "I swear, on my honor, to devote myself to the service of the republic, to the preservation of the integrity of its territory, to the defence of its government, its laws, and the property by them consecrated; to oppose, by every means which justice, reason and the laws authorize, all acts tending to reestablish the feudal system, or to revive the titles and distinctions belonging to it; finally, to contribute, to the utmost of my power, to the maintenance of liberty and equality." After Napoleon became emperor, the form of the oath was somewhat changed. The members swore to devote themselves to the service of the empire, to the preservation of the integrity of the French territory, to the defence of the emperor, to the

support of the laws, and of the property which they had made sacred; to combat, by all the means which justice, reason and the laws authorized, every attempt to reestablish the feudal régime, and to concur, with all their might, in maintaining liberty and equality. The decoration consisted of a star containing the portrait of Napoleon, surrounded by a wreath of oak and laurel, with the legend *Napoléon, empereur et roi*; on the reverse was the French eagle with a thunderbolt in his talons, and the legend *Honneur et patrie*. The star of the *légionnaires* was of silver, that of the officers of gold, and was suspended from a red riband with a white margin. The order consisted of grand-crosses (*grand aigle*), who wore the cross on a broad riband hanging over the left shoulder, and a star on the left side of the breast; of grand-officers, who wore the cross in the button-hole, and a star, somewhat smaller, on the left side; of commanders, who wore the cross round the neck; of officers, who wore the gold cross with a bow in the button-hole, and of legionaries, who wore the silver cross with a simple riband in the button-hole. The legion was composed of 16 cohorts, each of which had its seat in a different city, and contained 407 members; the whole number was, therefore, at first, 6512. Each cohort had a chancellor, treasurer and chief—the whole order a grand-chancellor and grand-treasurer. The pension of a grand-officer was 5000 francs, annually; of a commander, 2000; of an officer, 1000; of a legionary, 250 francs. There was also an institution for the education of the daughters of members of the legion of honor at Ecouen, under the care of madame Campan. After the restoration of the Bourbons, the order underwent essential changes. The head of Henry IV was substituted for that of Napoleon, with the legend *Roi de France et de Navarre*; and, on the reverse, the *fleur-de-lis* took the place of the eagle. The grand-crosses were limited to 80, the grand-officers to 160, the commanders to 400, the officers to 2000: the number of the legionaries was left unlimited. New members received no pensions, whilst those of the old members exceeded the prescribed sum; but on the death of the old members, the new ones were to receive their pensions. Foreign members received no pensions. It was evident that the legion of honor was coldly treated by the Bourbons, who restored the old orders. The members created during the hundred days were, of course, not acknowledged by the

Bourbons; but, in 1831, general Lamarque obtained their acknowledgment by a spirited speech, in the chamber of deputies, for which they sent him a sword with an inscription. Military honors are paid to the members of the legion, as they are also to the bearers of the *croix de Juillet*, which has been granted to 1528 persons who distinguished themselves during the struggle of July, 1830. This cross takes precedence of that of the legion of honor.

LEGISLATION. (See *Law*, Appendix to this volume.)

LEGISLATIVE BODY (*corps législatif*); an assembly, in the time of the French consulate and empire, consisting of 300 persons, which had neither the right to discuss nor to initiate a law, but merely to vote on a law proposed by the government and discussed by the tribunate (as long as that body existed), in their presence. The tribunate, on the other hand, had not the right to vote. It was an extremely lame contrivance, showing the political inexperience of the French at that time.

LEGISLATURE, HOUSES OF. Whether it is preferable to have two houses of legislature or one, has been a question on which politicians have maintained different opinions, though, at present, public opinion appears to be in favor of two houses, the instances of England and the U. States giving great weight to this division of the legislative power, and a single house in the case of large nations seems to be ill adapted to modern representative governments. During the middle ages, indeed, and as long as the assembly of the estates existed, these formed, in general, certainly, only one body; for, although the different estates may have met in different rooms, they had no proper independence of each other. In England, which has led the way in constitutional institutions, a happy conjunction of circumstances early united the clergy with the high nobility into one house, and the lower nobility, or gentry, with the representatives of the cities, into another; whilst, in the countries of the European continent, the clergy, the nobility, and the representatives of the cities, although they constituted different estates (in some cases, the superior nobility [*magnates*] and the free peasants formed also distinct estates), made but one legislative body; and, in most cases, the representation was so unequal, that the nobility and clergy entirely outweighed the commons, threw all the burdens of the state upon the citizens and peasantry, and prevented, almost entirely, the development of constitutional

establishments. In England, however, the division into two houses has had the effect of repressing the assumptions of different classes, by making them mutually checks upon each other, developing constitutional and public law, and introducing general taxation, and has contributed most essentially to the superiority in political advantages of the English people over the other nations of Europe. (See the article *Great Britain*, division *Parliament*; in that article, also, will be found an account of the privileges of the two houses, and of the difference between them.) In the more important English colonial establishments, political institutions, modelled, to a considerable degree, on those of the mother country, have been introduced—a governor, with a council (appointed by the English government), and a house, or assembly, with members elected by the people. This is the case where the extent and population of the colony warrants such an organization, and where the colony does not belong to a company, or where the great number of natives, living interspersed with the colonists, does not prevent such an establishment. Thus a council and a house of assembly exist in the two Canadas, Nova Scotia, New Brunswick, the English West Indies, and they existed in many of the colonies, which afterwards declared themselves the United States of America. The latter established, on declaring themselves independent, a congress, consisting of delegates from the several states, invested with certain powers by the articles of confederation, and forming but, one body. After the close of the revolutionary struggle, the federal constitution established a house of representatives, chosen by the people of the several states, and a senate, consisting of members chosen by the legislatures of the several states for six years. The separate states also established each two houses of legislature, with the exception of Vermont, which has but one. In Massachusetts and New Hampshire, the senators are apportioned among districts, with reference to the amount of taxes paid by the districts respectively. In the other states, the rule of apportionment is that of numbers. In the tabular view of all the constitutions of the U. States, affixed to the article *Constitution*, the reader will find the term for which, and the conditions upon which, the members of the two houses are elected, in the different states, and for the federal government. The French revolution began by uniting the three estates in one

house, in 1789. Different constitutions were framed in rapid succession. The constitution of Sept. 3, 1791 (monarchical), established but one legislative house. The constitution of June 24, 1793 (republican), declared, in section 39, the legislative body "one, indivisible and permanent." The constitution of the year III, Sept. 23, 1795 (with a directory of five members), established a council of elders, consisting of 250 members, and a council of five hundred. The members of the latter were to be, at least, 35 years of age, those of the former, at least, 40 years. The council of five hundred had the exclusive right of initiating laws. Both were chosen for three years. The constitution of Dec. 13, 1799 (consular), established a legislative body, which could only adopt or reject propositions made by the government, and communicated and discussed by the tribunate. (See *Legislative Body*.) The members were chosen for five years. There was also a conservative senate. (See *Senate*.) The consulate for life, and the imperial government, retained the legislative body, but the tribunate was abolished. The *Charte Constitutionnelle* at last established houses of peers (for life or hereditary), and of representatives—the latter on the basis of taxation. (See *Charte Constitutionnelle*, *Election*, and *France*.) In the article *France*, it will be seen, that, in 1830, when the elder Bourbon line was declared to have forfeited the throne, it was provided, in the additions to the charter, that the organization of the peerage should undergo a revision in 1831: the result we shall give under the article *Peer*. Poland, by the constitution granted by the emperor Alexander, has two houses—a senate, consisting of members appointed for life by the sovereign, and not by the viceroy, and a house of representatives. The kingdom of Norway has two chambers—the *Logthing* (q. v.) and the *Odelsting*, both together composing the *Storthing*. (q. v.) Bavaria, Hanover, Würtemberg, Baden and Hesse-Darmstadt have each two houses. The constitution which Joseph Napoleon gave to Spain, July 6, 1808, established one house, the cortes, consisting of three estates,—the prelates, nobility and people, with a senate, which, however, is not to be considered as a branch of the legislature. The constitution of the cortes of March 19, 1812, established but one house—the cortes. This organization was imitated in Piedmont, Naples and Portugal, at the time of the respective revolutions in those countries. The constitution granted to

Naples by Joseph Napoleon, June 20, 1808, established one house—a national parliament—consisting of five benches (*sedili*), those of prelates, nobility, landholders, learned men and merchants. Lord Bentinck's constitution for Sicily (1812) established two houses. In Sweden, by the constitution of June 7, 1809, there is but one house, consisting of the estates—the nobility, clergy, citizens and crown peasants. In the kingdom of the Netherlands, there were two houses of the states-general, one composed of members for life; and, also, two houses of the provincial estates. Saxe-Weimar has but one house, as had Saxe-Hildburghausen, at least before its union with Meiningen. Under the article *Netherlands*, we shall give the new Belgian constitution, provided it is settled. In the Ionian Islands, there is a senate of 10 members, and a legislative body of 40 members. (See *Ionian Islands*.) The diet of Switzerland (*Tagsatzung*) consists of 19 deputies, who vote according to instructions from their respective cantons. The constitution of the German diet (*Bundestag*) is similar. (See *Germanic Confederation*.) Neither of these bodies has any resemblance to the congress of the U. States. The constitutions of the new American governments, as Colombia, Brazil, Mexico, &c., have, in general, established two houses, on the plan of those of the U. States. In Bolivia, the legislative department consists of three branches, the tribunes, the senators, and the censors. (See *Brazil*, *Peru*, *Mexico*, &c.) We ought to mention, in connexion with this subject, that, in most governments, the executive has also a legislative voice, in so far that its sanction is required to give the force of law to the acts of the legislative bodies. Thus, in England and France, the royal assent is necessary to the passage of a bill. In the U. States, the president, and, in the larger part of the states, the governors, have a provisional veto.

LEGITIMACY; from *lex* (the law), whence *legitimus* (conformable to law); hence *legitimate* children are the offspring of a lawful marriage; and those which are born out of wedlock are said to be *legitimated* when they are declared legitimate by the state. A person *legitimates* his claims when he produces legal proof of their justice. After the French revolution, in the last century, had deprived the Bourbons of the throne of France, to which they laid claim by virtue of their right of succession, and, in particular, after their recovery of it, in 1814, the word *legitimacy* became very common in the language of

European politics. The question Who is the legitimate ruler? is intimately connected with the general subject of sovereignty. (q. v.) Formerly, when political questions were treated less scientifically, legitimacy was not so much a point of contest. States, countries, nations, passed by inheritance, conquest, marriage contracts, &c., and the legitimacy of a prince was decided, generally, like an affair of ordinary diplomacy; less, however, in the case of England than of the continent. But when the allies dethroned Napoleon and his brothers, they wanted something to oppose to the claims which he derived from his election by the people. A phantom was therefore created, at the congress of Vienna, called *legitimacy*, and, since that time, has been constantly used, but never defined, which, indeed, it cannot be, because the facts before the world are too stubborn for this theory of the hereditary descent of nations, like common property. If this right of inheritance could be proved, legitimacy would be something very easily definable; but there is a difference between an estate and a nation. The Austrian Observer, a semi-official paper, in order to prove the Turks legitimate masters of Greece, once defined legitimacy thus: "Every sovereign is legitimate who is such by a long series of treaties with other lawful sovereigns." Austrian logic! Misconceptions of certain passages of the Old Testament, a confusion of religious and political ideas, together with feudal views surviving the institutions which gave them birth, have involved the question of legitimacy in great obscurity. The most absurd doctrines have been broached in the attempt to support this doctrine of the holy alliance, and other follies, which have been maintained at the expense of the blood and happiness of nations. The people of a republic, of course, need no arguments to convince them of the futility of the theory; but we might say to the European advocates of legitimacy, that it has no foundation in history. If force is to be adopted as its basis, don Miguel is the legitimate ruler of Portugal. If it rests on long possession, we might ask how many generations are required to legitimate robbery; or we might say, with Luther, that, on this principle, Satan is the most legitimate of rulers, because his kingdom is the oldest. In our prosaic times, those who rest the right of sovereignty on birth cannot, like the ancients, make a Jupiter or an Apollo the founder of a royal line, and deduce the divine right of princes

from their divine descent; and, if they look no higher than a human ancestor, it will be hard to prove the direct descent of many a princely house from the source whence it derives its claims to sovereignty. The memoirs of courts show how often plebeian blood has been mixed with royal. But it is needless to spend time in refuting a theory which even Chateaubriand, once its staunch defender, has disclaimed. In a late speech, he says, "I do not believe in the divine right of kings," and "monarchy is no longer a religion; it is a political form."* For all who consider the state as a society of men with equal rights, and the government as established for their welfare, the question is easily solved. He who rules with the approbation of the people is legitimate. If, after submitting, for a while, to one family, they choose to transfer their allegiance to another, they have, incontestably, the right to do so. The mistakes to which they may be liable, in using their rights, do not affect the rights themselves. The good of the people is the sole object of government, and no title, however high-sounding, or old, or well-earned, can contest with it. History, moreover, is full of instances of reigning houses displaced by revolutions, and succeeded by others, which have been considered legitimate, on account of their acceptance by the people. [As this question has afforded, and is likely to afford, so much dispute in Europe, the following article is given from the German Conversations-Lexicon. Every one knows what a shock the doctrine of legitimacy has received from the late revolutions, particularly that of France, and it is not necessary for us to attempt a formal refutation of such parts of the following article as may be objectionable.] The word *legitimacy* is now commonly used, in Europe, to denote the lawfulness of the government, in a hereditary monarchy, where the supreme dignity and power pass by law from one regent to another, according to the right of primogeniture. In this sense, Napoleon Bonaparte is called an *illegitimate* ruler of France, though he was acknowledged by the French nation, and by other powers (even by England, which negotiated and concluded with him, as first consul, the peace of Amiens). Louis Stanislaus Xavier, on the contrary, as the

* In the session of the chamber of peers, April 19, 1831, when the banishment of the elder line of the Bourbons was discussed, even the duke of Fitz-James waved the idea of divine right, and appealed to the people.

eldest brother of Louis XVI, is called a *legitimate* ruler of France, because (agreeably to the Salic law, which prevails in the French monarchy), after the death of Louis XVI, his son was to succeed to the throne, under the title of *Louis XVII*; and, as he died without children or brothers, and his sister (the present duchess of Angoulême) could not succeed, his first uncle (formerly count of Provence) was to be considered as Louis XVIII, although the Bourbon dynasty, in fact, ceased to rule at the death of Louis XVI. This signification of the word is plainly too limited; for, 1. it is not adapted to states with elective governments, notwithstanding a regular government is established in them, as well as in hereditary states, by constitutional laws, and consequently there are legitimate rulers in them; 2. it is not adapted to hereditary states, if the reigning family becomes extinct, when a new family must be called by the nation to the throne, or a different form of hereditary succession be adopted in regard to the persons who are to fill the highest offices of dignity and power. But there is an error, also, at the very foundation of the above definition of legitimacy: it supposes that the state, that is, the people living in a certain territory, in civil union, is the private property of a single family, transmissible, like all other private possessions, from the parents to their children, or other relations, as long as any branch of the family is living; for one man can never, rightfully, be the property of another—still less a multitude of people, in civil union, or a state. If the idea of property was applicable in this case, the ruler ought rather to be called the property of the state, than the state the property of the ruler; but the idea does not admit of being applied to the relation existing between a state and its governor. This relation can be properly considered only as a contract, by which the dominion of the state is given to the ruler, whether the compact be merely virtual and tacit, or express and formal, and whether the supreme power is given to a definite individual, who is appointed anew every time, or to a whole family, from which the rulers are to succeed one another, without a fresh choice, in order to prevent the dangers attendant on frequent elections. But there is another and more comprehensive signification of the word *legitimacy*, by which we are to understand the order existing in a state, and established by law, with respect to the form of government, and the persons to whom

it is intrusted. The historical origin of this order is not to be taken into the account, but merely the fact that it is established by the law (which, in theory, expresses nothing else than the universal will, or the will of the people), and has thus gained the form of a right. If we look to history, we shall find few governments that have a claim to legitimacy as having been lawful in their origin. As regards the Bourbons, it is well known that Hugh Capet, the founder of the third dynasty of the French kings, from whom also the Bourbons descended, gained the French throne, to the injury of the existing sovereigns, by his courage and ability, in the tenth century. If it is asserted that illegitimate authority was made legitimate by being transmitted from one person to another, then it must be conceded, that, if Napoleon had died before his abdication, and left the power to his son, the latter would have been a legitimate sovereign of France, and consequently there would have been two legitimate dynasties in the kingdom—the Bourbon and the Napoleon; but it is not easily understood how mere transfer can make that power legitimate which was at first illegitimate. It cannot be considered the same as prescription (*prescriptio*); for prescription only takes place when a positive law, relating to the rights of private persons, has fixed a certain period, within which some result takes place; but neither national law, nor the laws of single states, fix any kind of prescription in regard to the rights of a government. A ruler, in truth, becomes legitimate, if the people submit to him, and thus in fact, if not formally, consent to cede to him the supreme dignity and power; but this was the case with Napoleon. The French people acknowledged him their sovereign—first under the title of *first consul*, and afterwards under the title of *emperor*; and the state of things thus established in France, was approved even by foreign powers. The French nation cannot have been forced to submit to him, because, when he took the reins of the government, he had come from Egypt without an army, and his power was far too small to subdue the whole French people. Grant that one party was unjust in declaring the family of Louis XVI to have forfeited the throne, still the French princes, by their flight from France, had, in a manner, banished themselves, and resigned their claims to the throne; for these claims could not be maintained by words merely, but required action. They were not permitted to leave the king, with

whose person all their rights were connected; on the contrary, they were bound to defend his person and his rights, as a sovereign, even at the peril of their lives. But, as they regarded only their own safety, and deserted France and its throne, it might easily be shown that they, in fact, renounced their claims, and even promoted that anarchy, from which none but a mighty hand could rescue their country. If now France acknowledged its deliverer (for such Napoleon, at that time, indisputably appeared) as its monarch, because the old dynasty suffered its claims to be overlooked, what was wanting to make him a legitimate sovereign? But this legitimacy was wanting, when, on his return from Elba, he undertook to resume the throne of France; for, in this case, he overthrew an existing political order, and occasioned a kind of anarchy. A large part of France formally withstood him, and refused to send representatives to the *champ de Mai*, where he intended to establish his legitimacy. Moreover, no foreign power recognised his authority. What the event would have been if Napoleon had prevailed at Waterloo, cannot be determined; but it is certain that the modern French theory of legitimacy would have been subjected to the greatest difficulties. This theory, however, has never been reduced to practice, but only the more limited one above explained, as is proved by history in general, and, particularly, by the history of England, where the throne of the Stuarts is now occupied by sovereigns, whom all the world looks upon as legitimate, though, till the death of the last pretender, they must have been viewed, according to the ultra theory, as illegitimate. This leads us to the conclusion, that the proper point of view for considering legitimacy, at present, in Europe, is not, in relation to the lawful title to power, but only to its actual existence; and that the national law of modern Europe, while it aims to put an end to the convulsions of the last 30 years, is founded on the support of the present state of things with the changes confirmed by the unanimous consent of the principal European powers. Hence arises a very definite notion of legitimacy, wholly free from the difficulties which occur in accounting for the lawful origin of power. For, on this ground, it is no longer necessary to show how a national government and dynasty was established in early times, but only that it is now acknowledged. The acknowledgment is that of the European powers,

so called by way of eminence; that is, according to the use of the term since the congress of Vienna, in 1815, of all those states which do not depend entirely for their existence on a federative union; or of the eight powers which signed the peace of Paris; or, in a more limited sense, of the five powers which sent their commissioners to the last congress. In this practically admitted signification, legitimacy relates not merely to the dynasty, but also to the forms of government. It holds strict monarchical principles, as a general rule, and allows only the few actually existing exceptions; but it would be impossible to acknowledge an antimonarchical change, even though it were proposed voluntarily by the sovereign himself; for with this idea of legitimacy is closely connected the right of the European powers to prevent, by force of arms, any alterations in the government, which are opposed to the monarchical principles of other states; and as, in this, it has reference only to the dangers which may accrue to other states from the establishment of republican institutions in any one, it considers only the fact of their existence, not the manner of their origin. The right of armed interference in the internal affairs of foreign states, it is well known, has never been disputed, but by England and America. Indeed, it has been maintained, even by philosophers (Kant, *Zum ewigen Frieden—On perpetual Peace*) who make it a fundamental article of international law, that no state should be without a representative government. This right of armed intervention, however, admits of serious question: if it was once acknowledged, it might be used, also, by republics. In addition to the importance of the doctrine of legitimacy, in regard to subjects of international law, it is equally important as respects the internal government of a state; as it depends chiefly upon this to decide how far the acts of a government, merely usurped, can be obligatory on the legitimate government, if it should be again restored. This obligation can neither be maintained, nor denied, unconditionally. It is impossible to declare all those acts of the public authority, which have taken place during a long usurpation, invalid. It would be equally absurd to treat as absolutely unalterable all abuses of justice (confiscations, penal laws, attacks upon the private property of the legitimate ruling house) by which the usurpation was attended. If the previous sovereign, therefore, is deposed, no one can refuse to

the people the right of submitting, at least for a season, to that power which has been established in the place of the legitimate government, especially when the latter has ceased to struggle against the usurper, or continues its resistance without sufficient means. This principle was nowhere expressed so early and so decidedly as in England; for nowhere has there been such a variety of governments, which were afterwards declared to be mere usurpations, as there, during the contest, for 64 years, between the houses of York and Lancaster, and, subsequently, at the time of the commonwealth and of Cromwell. Hence the English early learned to distinguish actual sovereignty (government *de facto*) from legal government (government *de jure*), and laid down the position, that subjects were bound to yield obedience, even to a usurper, as long as he is in full possession of public power, and that they are equally guilty of high treason in forming conspiracies against such a usurper, as against the lawful monarch. (This is said by sir Matthew Hale, in his Pleas of the Crown, i, 60; Blackstone, Commentaries, i, 370, and iv, 77.) Accordingly, under Edward IV of York, when he had deprived the house of Lancaster of the throne, in the person of Henry VI, persons were punished, who had been guilty of treason against the last king of the deposed house; and an express law of Henry VII, in the year 1495, declared all persons innocent, who had promised or yielded obedience to the king *de facto* (the usurper). Although Charles II numbered the years of his reign from the death of his father (Jan. 30, 1649), yet all the acts of the interregnum remained in full force, unless they were necessarily repealed by the enactment of new laws. In France, at the restoration, the statesmen were obliged to adopt the same principle. The idea of legitimacy is to be considered, moreover, in reference to the limits of the power of sovereigns, as well the natural and universal, as the positive or conventional. Even the ancients distinguished tyranny—power without a just foundation (*tyrannis absque titulo*, or usurpation)—from the unjust use of power in itself legitimate (*tyrannis exercitio*); and, if legitimacy is once viewed as a principle of national law, it must necessarily be as much an object of support, in this latter relation, as it is against usurpation and revolution. The maintenance of the existing state of things is as much required in this view as in the others, and for a higher purpose. If the European powers

are justifiable in maintaining their monarchical principles, they are no less authorized to maintain them in their purity; that is, as the means of legal authority, and to prevent the ruin of those institutions by which they are to be kept from degenerating into despotism; or, if these institutions have already been destroyed, to renew them, as prudence and the spirit of the times will allow. This authority, which may be deduced from a necessary duty, they have particularly when it is requisite to support an existing government, by arms, against usurpation or the violence of the mob. When this view of legitimacy finds place among the practical principles of national law (and it cannot be said to be rejected, as much has already been done in its spirit), an important step will have been made towards the accomplishment of the grand project of universal order, a universal tribunal, and universal peace. (See Malte Brun's *Traité de la Légimité*, &c., Paris, 1825; and the articles *Aix-la-Chapelle*, *Congress*, *Holy Alliance*.)

LEHMANN, John George; a major in the royal Saxon army, and the inventor of a method of topographical drawing, which is called after his name. He was the son of a miller in humble circumstances, and born May 11, 1765, at Baruth, in the former Saxon electorate. His early education he received from the village smith, and afterwards worked in the mill. The recruiting officers, who often attacked the lower class of people in disguise, waylaid him, and carried him off to their quarters, as he was walking to church. Lehmann soon distinguished himself by his industry and skill in writing and drawing. In 1793, he obtained his discharge, in order to devote himself entirely to topographical labors, and surveyed about 500 square miles in the Erzgebirge, together with several private estates. The want of the common facilities for surveying, led him to the invention and application of those important rules, which are found in the second volume of his work. Lehmann also gained much experience in regard to the origin and constitution of single elevations, and of mountainous chains, and afterwards founded upon it his mode of topographical drawing, translated into English by Si-born. He made the campaigns under Napoleon, in the Saxon army, and performed important services. Napoleon held him in high estimation. By constant application to his profession, he contracted a disease which finally terminated his life, Sept. 6, 1811. His system is of great importance to the soldier. It was pub-

lished, after his death, by professor Fischer, with Lehmann's last improvements.

LEIBNITZ, Gottfried Wilhelm, baron of, one of the most celebrated scholars and philosophers that Germany has ever produced, was born at Leipsic, July 3, 1646. His father, who was professor of jurisprudence in that city, died before his son had completed his sixth year. Leibnitz attended the school of St. Nicholas, in Leipsic, till he was 15 years old, without, however, adhering strictly to the prescribed course, as he was devotedly attached to Livy and Virgil, among the Latin writers. The latter he knew almost entirely by heart, and, even in his old age, he used to repeat whole books of his poems. He was soon distinguished for rapidity of comprehension and facility of expression. At the age of 15 years, he began his academical course at Leipsic, and, although his principal study was ostensibly law, he paid particular attention to mathematics and philosophy, at that time taught by James Thomasius. He passed one year at Jena, in order to avail himself of the instructions of the celebrated mathematician Ehrhard Weigel. After his return to Leipsic, he studied the Grecian philosophy. He gave a splendid proof of his progress, in his philosophical dissertation *De Principio Individuationis*, which he defended under Thomasius (1664), and which was followed by several legal treatises, e. g. *De Conditionibus* (1665), and by a remarkable philosophico-mathematical treatise, *De Arte combinatoria*. In his 20th year, he presented himself to the legal faculty, as a candidate for a doctorate, but was refused on account of his youth, and received his degree at Altorf. He was offered the place of professor extraordinary of law, in that university, but he preferred going to Nuremberg, where there were many distinguished men. The baron Von Boineburg, minister to the elector of Mentz, having become acquainted with him, withdrew him from a society of alchemists, in that city, with which he had connected himself, and, promising him a place in the service of the elector, induced him to fix himself at Frankfort on the Maine. Here appeared, in 1667, his *Nova Methodus discenda docendaque Jurisprudentia*, which is remarkable for its clear, and, at the same time, profound views, and which, at the request of his patron, was soon followed by a treatise, in which he endeavored to prove to the Poles, that it was for their interest to elect the prince of Neuburg king, in preference to any of the other candidates. At the suggestion of

Boineburg, he was now named an electoral counsellor, and chancellor of justice; but this business could not satisfy a mind thirsting for knowledge. He continued his literary labors, and published his *Theoria Motus abstracti*, and *Theoria Motus concreti* (1671, —two physical inquiries, remarkable only for the boldness of their views), and also his *Sacrosancta Trinitas, per nova Argumenta logica defensa*, a work directed against the attacks of the Pole Wissowatius, on the doctrine of the Trinity. In the mean time, the literary splendor of Paris had attracted his attention, and he willingly undertook to accompany the young Boineburg thither (1672). The distractions of this capital did not draw him from his studies. He applied himself particularly to mathematics, and enjoyed the acquaintance of the celebrated Huygens, whose expectations he answered by the invention of an arithmetical machine, similar to that of Pascal. His patron, Boineburg, died 1673, and Leibnitz, who had nothing to detain him longer in Paris, declined the place of pensioner in the academy, as it would have been necessary for him to embrace the Catholic religion, and went to England, where he became acquainted with Wallis, Bayle, Oldenburg and Newton. He then applied to the duke of Brunswick-Luneburg, who gave him the office of counsellor, and a pension, with permission to extend his residence in foreign countries at his pleasure. Availing himself of this permission, he returned to Paris, where he spent 15 months, devoted entirely to mathematics, and then returned, by the way of England and Holland, to Hanover, where he arrived 1676, and immediately entered upon the superintendence of the library, which was his principal duty. Here he soon published his treatise *De Jure Suprematus ac Legationis Principum Germaniae*, and labored, with great zeal, to effect the publication of the *Acta Eruditorum*. On the death of the duke of Brunswick, his successor commissioned Leibnitz to write the history of his house. In order to consult the documents necessary for that purpose, Leibnitz went (1687) to Vienna, and (as the old counts of Liguria, Tuscany and Este were sprung from the same source as the house of Brunswick) thence to Italy. The three years which he spent in making these tours of investigation, supplied him with an immense mass of diplomatic and political materials, the smallest portion of which appeared in the work he had undertaken: the remainder was published in 1693 and 1700, under the title *Codex Juris*

Gentium diplomaticus, and *Mantissa Codicis*. At the same time, he employed himself in arranging the materials which he had collected for his historical undertaking, and, after having published an essay on the connexion between the houses of Brunswick and Este, which procured him the appointments of privy counsellor of justice, and historiographer, he gave to the world (1707—11) *Scriptores Rerum Brunsvicensium* (3 volumes, folio). But this important work was only a preparatory step. The history itself was never published: the outline only was found among his papers after his death, and published in the *Acta Eruditorum* for 1717. According to this plan, we should have had a general account of the primitive condition, not only of Germany, but of the whole world, in conformity with the views given by Leibnitz in his *Protogæa*. (See the *Acta Eruditorum* for 1693.) The *Accessiones historicae*, and the *Disquisitio de Origine Francorum*, were published at Hanover, in 1715. As Leibnitz displayed a profound knowledge of history in the above-mentioned works, so he showed a no less intimate acquaintance with theology, in his attempts at forming a plan for reuniting the Protestants and Catholics, in which he spent much fruitless labor, in conjunction with Molanus and Bossuet. Among his plans for the good of mankind, may be mentioned his exertions to invent a universal character, and a common philosophical language (*pasigraphy*). His labors in another scientific undertaking were better rewarded. The elector of Brandenburg (afterwards Frederic I, king of Prussia) requested his advice in the establishment of the royal academy of sciences at Berlin, and, when the institution was completed, according to his plan, the elector made him president of the academy (1700). Leibnitz furnished a great part of the papers in the *Miscellanea Beroลินensia*, which the new academy published in 1710. On the death of the king, three years after, his successor having little taste for the sciences, Leibnitz foresaw the fall of the society, and therefore hastened to Vienna to obtain for it the protection of the emperor Charles VI. His efforts were unsuccessful, although he received a most flattering reception from the emperor, who had already conferred on him the dignities of baron, and of aulic counsellor, with a pension of 2000 florins. He also had an interview with the czar Peter, at Torgau (1711), who, in return for his advice concerning the civilization of his vast empire, conferred on him the title of privy coun-

sellor, with a pension of 1000 roubles. Loaded with honors, he crowned his literary fame by his celebrated *Essai de Théodicée* (1710), in which he maintained the doctrines of preëstablished harmony and optimism, and which was followed (1715) by his *Essai sur l'Entendement humain*. The life of this individual, so highly favored by fortune, was not entirely free from calamity. His unfortunate controversy with Newton, concerning the discovery of the differential calculus, and the pains of the gout, imbittered the close of his active life. He died in his 70th year, Nov. 14, 1716. His monument, constructed in the form of a temple, bears the simple inscription *Ossa Leibnitii*. Leibnitz was of the middle size, thin, but of firm health, with a habitual stoop. His hair was black in his youth, but labor early rendered it white; and his eyes, which were short-sighted, were strong, even in old age. He had a pleasing countenance, a warm temperament, and as much animation in his delivery as he had in his labors. He studied during nearly the whole night, and often took his sleep in his chair, which is preserved in the library at Hanover. Reading every thing, without distinction, he contented himself with making short extracts, on little pieces of paper, which he kept in different compartments, though his memory was so excellent that he had little need to refer to them. His correspondence, which extended even to China, together with the other relations which he maintained with different classes of men, took up a great part of his time. In his intercourse with others, he was easy, without arrogance or jealousy; irritable, but quickly reconciled. His expenses were very moderate, and his enemies reproached him with avarice. He was totally negligent of his domestic affairs, and was never married. The spirit of the age, the study of the older systems of philosophy, among which the Grecian had occupied much of his attention, and, above all, the mathematical turn of his mind, combined to produce his peculiar system of philosophy. He expected to reform philosophy by giving it this direction, and he hoped to establish its principles in such a manner that the strife between different parties would cease of itself. On this account, he was in favor of rationalism (q. v.), in the sense in which it was maintained by Plato, and the system of demonstration, which prevented him from entirely rejecting the scholastic philosophy. There are in philosophy, as in mathematics, necessary truths, which

cannot be learned from experience, but must be grounded in the soul itself, as they rest on principles, the proof of which is independent of the evidence of the senses. This forms the basis of the Leibnizian rationalism, the principal characteristics of which are a peculiar theory of knowledge, the doctrine of Monadology, and the Theodicea, or doctrine of optimism. With regard to knowledge, according to this system—1. The necessary truths are innate in the soul, not, indeed, actually forming objects of knowledge, but capable of being called forth by circumstances. Whatever is derived from the senses is confused, and distinct knowledge is possessed only by the understanding. These views are opposed to the empiricism of Locke. In order to attain truth, it is necessary to use the rules of logic, as mathematicians also use them, by unfolding, analytically, the simple truths contained in a subject, until the fundamental truth is attained. The Cartesian criterion—clearness and distinctness—is not sufficient. "Our conclusions," says Leibnitz (*Op.* ii, 24), "rest on two great principles—the principle of contradiction (according to which we deem that false which involves a contradiction, and that true which is opposed to falsehood), and the principle of the sufficient reason (which teaches that no assertion is true, if no sufficient reason can be given why it is true, rather than false), which leads to an absolute final reason, independent of accidental circumstances. But the final reason of the certainty of innate necessary truths is in God, as the source of all necessary and eternal truth. 2. Monadology forms the central point of the system, and Leibnitz believed that, in this, he had discovered the fundamental basis of actual knowledge. All experience teaches us that there are compound substances; consequently there must be simple ones. The senses give us only confused, the understanding distinct, knowledge; and the simple, which cannot be recognised by the senses, is the ground of the compound. These simple substances, from which the compound are formed, and each of which differs, in its qualities, from all others, since there are no two things exactly alike, Leibnitz calls *monads*, of which he assumes four sorts—pure monads (or living beings), the souls of beasts, the souls of men, and God, who, as the origin of all knowledge, of reality, and of the existence of things, the eternal, original Monad, he calls the *Monas monadum*. All created monads are united with bodies, or, rather,

all finite beings are aggregates of monads, some having a central and governing monad. The different classes of monads conceive of the universe with different degrees of distinctness: God alone conceives it perfectly. There is no actual influence (*influxus physicus*) of one thing on another, but only an ideal connexion; i. e. the internal changes of each monad are so arranged as to agree with the changes in the monads immediately connected with it. The cause of this agreement is the infinite wisdom and almighty power of the Deity. The divine understanding is the prototype of all truth, beauty and absolute good, and by it all the interior changes in the monads were so predetermined, that there is a perfect harmony in their succession. This predetermination or established harmony was arranged by the Godhead when the plan of the world was formed. 3. The Theodicea is the defence of the supreme wisdom of the Creator of the world, which had been impugned, on account of the existence of evil. Such a Theodicea Leibnitz attempted, particularly on account of the contrary views brought forward by Bayle. According to the Leibnizian system, an infinite number of worlds are possible in the divine understanding; but, of all possible ones, God has chosen and formed the best. Every thing which really is, is best in connexion, even if, by itself, it is imperfect. This system is therefore denominated *optimism*. Each being is intended to attain the highest degree of happiness of which it is capable, and is to contribute, as a part, to the perfection of the whole. The existence of evil is no argument against this system, because metaphysical evil is merely a necessary imperfection in the nature of finite things, from which imperfection, physical evil (suffering) and moral evil (sin) necessarily proceed. Moral evil is founded in the freedom of finite spirits, which consists in choosing, according to grounds of preference, one among many physically possible actions; for, although every thing in the world is necessarily determined, still man, being ignorant of the future, must act from the convictions of his reason. Leibnitz nowhere makes a complete connected exposition of this philosophical system, but has only proposed it in his writings, by piecemeal, and it is therefore difficult to follow his course of thought. This is not the place to enter into a more critical examination of the value of these hypotheses; it is sufficient to observe, that they have been of

the greatest service in promoting the progress of reason, as they have given that impulse to the philosophical world, which his mathematical discoveries, to an account of which we now proceed, gave to the mathematicians of his time. His attention was early directed to mathematical researches; and, in a letter to the countess of Kichmannsegge (1716), he relates, that, even in his 16th year, he was occupied in considering the differences of those numbers whose succession forms a regular series. He thus arrived at the law of constant magnitudes, which is always found exactly, or by approximation, if the members of the series, and then their first, second, &c., differences are subtracted from each other; but, when he was in England, wishing to publish his supposed discovery, he found himself anticipated by a French mathematician, Regnault. A second similar affair induced him to study Mercator's *Logarithmotechnica*, which he carried with him to France, where he surprised Huygens by communicating to him his discovery of an infinite series for the surface of the circle, similar to that of Mercator for the hyperbola. This was made known by Oldenburg to Newton, who congratulated Leibnitz on his discovery. Animated by this result, Leibnitz resumed his researches into the difference of numbers, and, in this way, he was led to the discovery of the differential calculus. In a letter of June 21, 1677, he communicated this discovery to Oldenburg, for Newton's examination. In comparing the whole course of reasoning which he pursues in his calculations, with the views which lie at the foundation of Newton's method of fluxions, not the least similarity can be discovered between the two methods; which is the best proof that each of these great men, in reality, attained the same result for himself, entirely independent of the other. Leibnitz, however, received no answer from Newton to this remarkable letter, and things remained in this state till 1682, when the *Acta Eruditorum* was commenced. Leibnitz was, from the beginning, one of its most active contributors, and, in the October number of 1684, he published a complete account of his differential calculus, exactly as he had communicated it to Newton. It is worthy of remark, that, at this time, no one questioned the claims of Leibnitz to the discovery of this new mode of calculation. On the contrary, Newton publicly acknowledged the merit of the German, and made the most honorable mention of him in his *Prin-*

cipia. Leibnitz continued, with untiring activity, to make improvements in his method. The differential calculus, together with its converse, which Leibnitz called *summatory*, but to which John Bernoulli gave the name of *integral calculus*, was in high esteem on the continent, and had been much used and extended, both by Bernoulli and the marquis de l'Hôpital, when, in 1699, 22 years after the letter of Leibnitz to Newton, which was dated June 21, 1677, and 15 years after the publication of the theory in the manner already mentioned, in the October (1684) number of the *Acta Eruditorum*, it was contended, for the first time, by Fatio de Duillier, that Newton was the discoverer of this mode of reckoning. This article was written in an offensive tone, and Leibnitz answered it in the *Acta Eruditorum*. His reply, for a time, put an end to the dispute; but, five years afterwards (1704), Newton, having published his *Optics*, at the close of which he appended an exposition of his method of fluxions, which he claimed to have invented as early as 1666, the *Acta Eruditorum* gave an extract from this work in the next year, and, by making a comparison between the method of fluxions and the system of differential calculus, to the disadvantage of the former, awakened anew the dispute between the parties. Keill, professor of astronomy at Oxford, declared, in the *Philosophical Transactions* for 1708, not only that Newton was the original inventor of the new system, but that Leibnitz had formed his upon Newton's merely by changing the expressions and the signs. Leibnitz, therefore, wrote to Hans Sloane, secretary to the royal society, to request the society to decide between him and Keill. The society immediately named a committee, who came to the following conclusion, that, in reality, there was no difference between the differential calculus and fluxions, and that the question did not turn on the invention of the one or the other, but on priority, with respect to which there was strong proof that Newton had possessed the system 15 years before the publication of Leibnitz's article in the *Acta Eruditorum*, and that, therefore, Keill's assertion concerning Leibnitz could not be considered as a calumny. This decision of the society only rendered the schism between the parties wider; and Leibnitz rendered the quarrel irreconcilable, by sending a letter to the abbe Conti, who was then in England, and acted the part of a mediator between the parties. In this letter, which was intended to be

shown to Newton, among other offensive expressions, he gave him to understand, that it was impossible that he should have invented the algorithm of infinitely small magnitudes before himself. Newton replied through Conti; and the dispute continued till the death of Leibnitz. Lewis Dutens, secretary of legation in the English service, published the most complete and accurate edition of the works of Leibnitz—*Go. Gul. Leibnizii Opera omnia* (Geneva, 1768, 6 volumes, 4to.). In Dutens's edition, however, all those philosophical works are omitted which Raspe had published (Amsterdam, 1760, 4to.), under the title *(Œuvres philosophiques de M. Leibnitz*. Both collections should be united. Dutens did not accomplish his undertaking without great difficulty, and he describes, in a very interesting manner, the obstacles he encountered in collecting writings so numerous and so widely scattered, and his correspondence on the subject with Voltaire, in his *Mémoires d'un Voyageur qui se repose* (volume i. p. 248). Eccard, his intimate friend, and, after his death, librarian at Hanover, first wrote the life of this extraordinary man, who had surveyed the whole field of science with a penetrating eye. We have also eulogies on him, by Kästner (1769), by Bailly and Fontenelle.

LEICESTER; a town of England, the capital of Leicestershire, on the Soare, in the centre of the finest wool district in the kingdom. The chief manufacture is that of combing and spinning wool, and making it into stockings; and, in this business, it is, except Nottingham, the principal town in the kingdom. It sends two members to parliament. The number of voters is about 2000. Population, 30,125.

LEICESTER, EARL OF. (See *Dudley, Robert*.)

LEIGHTON, Robert, a pious Scotch prelate, was born in London, in 1613, and educated at the university of Edinburgh. He was subsequently sent to France, and, on his return, obtained Presbyterian ordination, and was settled at Newbottle, near Edinburgh. Disapproved of by his Presbyterian brethren, as not sufficiently polemical in his discourses, he resigned his living, and was soon after chosen principal of the university of Edinburgh. When Charles II resolved to reestablish Episcopacy in Scotland, doctor Leighton was induced to accept a bishopric, but chose the humblest of the whole, Dumblain, and would not join in the pompous entry of his brethren into Edinburgh. He nevertheless became archbishop of Glasgow,

chiefly impelled, it is believed, by a hope of furthering a scheme of reconciliation between the Presbyterians and Episcopalians. Disappointed in this hope, as also in his wishes to moderate the acrimonious feelings of both parties, he went to London, and requested leave to resign his see; but his resignation was not accepted. He never, however, returned to Scotland, and died in London, Feb. 1, 1684, in the 71st year of his age. Archbishop Leighton was celebrated for his gentleness, moderation and disinterestedness; for, although his bishopric produced only £200, and his archbishopric barely £400 per annum, he founded exhibitions both in the colleges of Edinburgh and Glasgow. As a preacher, he was admired beyond all his contemporaries, and his works have not yet lost their popularity, a complete edition of them having been published in 1808 (6 vols., 8vo.), with a life of the author.

LEIPSIC (properly, *Leipzig*). There is, perhaps, no city in Europe, of its size and population, so important in a literary, commercial and historical connexion, as Leipsic. At the end of the tenth century, a little Sclavonian village stood in the angle formed by the confluence of the Parde with the Pleisse. It received its name from the numerous lindens (Sclavonic, *lip, lipa*) in the neighborhood. The first mention of Leipsic, as a fortified city, with walls and ditches, is in the twelfth century, in the time of Otho the Rich, who established the two fairs of Easter and Michaelmas. The bull which Alexander V issued, in 1409, for the establishment of the university, calls it "the populous and spacious Lipzk." The city itself, at that time, was probably of the same extent as at present, for the ditch surrounding it existed in 1454. But during the peace which followed the seven years' war, the fortifications fell into decay, and the ditch was converted into a garden, which, instead of ramparts, encircled the whole city. With the increasing prosperity of the citizens, the city received new embellishments. Leipsic stands in a large plain, which is fertile, and enlivened by thriving villages. According to Oberreit, the observatory is situated in lat. 51° 20' 19" N., lon. 12° 21' 45" E. Population, 41,000. The plains of Leipsic are watered by four rivers—the Pleisse, the Elster, the Parde, and the Luppe. The city has four gates, and is divided into four quarters, containing seven squares, six principal streets, and twelve small streets. The principal public buildings, some of which are fine speci-

mens of architecture, are, the town-house, built in 1599, the exchange, the churches of St. Thomas and St. Nicholas, the St. Thomas school, the Auerbach court, the Pleissenburg with the observatory, the cloth hall, &c. Among the inhabitants are many descendants of the fugitive Huguenots, Italians, and some Jews, enjoying protection. The commerce of Leipsic, which draws foreigners from almost all nations to the great fairs, has not, indeed, the extent which it had 25 years since, but it employs, nevertheless, directly or indirectly, the majority of the inhabitants. Between 8000 and 9000 purchasers assemble at the great fairs. The principal articles are horses (400 to 500 select animals is the average number offered for sale), peltry, cotton stuffs and cotton, wool, colonial products, English and French goods, and the productions of the Erzgebirge, books and works of art. There are, in the city, about 300 retail dealers, and 200 wholesale merchants. Traders often come hither from distant countries—Greeks, Russians, and even Persians. The book-trade of Leipsic is unique. Every German publisher has an agent there, who receives and disposes of his publications. The agents send packages of books, twice a week, to all parts of Germany. Twice a year, a book-fair is held at Leipsic, which is attended by booksellers from all parts of the country. Some French, Russian and English booksellers are also present. The Leipsic annual catalogue of books shows the immense number that are written in Germany. Manufactures, in general, have been pursued with little success in Leipsic; but the manufacture of gold and silver thread, of tobacco, of playing-cards, oil-cloth, besides printing and type-founding, have profitably employed, for years, a large number of workmen. The university library, of about 60,000 volumes, with 1600 manuscripts, is principally rich in the philological and medical departments, as well as in ancient theology. It was formed from the libraries of the suppressed monasteries. The public library, founded in 1605, contains valuable treasures of history and jurisprudence. The collections of paintings of Speck, Keil, and other private individuals, are uncommonly extensive and easily accessible to amateurs. To the young musician, Leipsic affords great opportunities of improvement. The principal productions of modern instrumental music are here heard in great perfection. For centuries have the two learned schools of St.

Thomas and St. Nicholas been celebrated. Gesner, Ernesti, Fischer, Reiske, were educated here. The university was founded in 1409, by a great number of the students from Prague, with their teachers, on which occasion the elector Frederic the Quarrelsome, and his brother William, took, as the models of the new institution, the universities of Prague and Paris. Many of the most famous scholars of Germany have taught in this institution, which now numbers 1300 students and upwards of 70 professors. Botanical gardens, hospitals, and other necessary establishments, are connected with the university.

LEIPSIK, BATTLES OF. Twice have the destinies of Germany been decided by arms on the plains of Leipsic—Sept. 7, 1631, and Oct. 18, 1813; and the battle of Nov. 2, 1642, was by no means unimportant in its consequences. In the battle of Sept. 7, 1631, the military talents of Gustavus Adolphus, and the superior tactics of the Swedes, prevailed over the Catholic German generals, Tilly and Pappenheim, and Tilly was shown not to be invincible. Of his army of 35,000 to 40,000 men, 8000 fell, 3000 were taken prisoners. The victory was decisive, and Protestant principles triumphed in North Germany. In this battle, the Swedes made good use of their leather cannons. Eleven years after, in 1642, Torstenson defeated, at the same place, the imperial Saxon troops, under the arch-duke Leopold William and Piccolomini. But the battle of 1813 was most remarkable for its extent and duration, the magnitude of the contending armies, and the importance of its consequences. For the campaign of 1813, the allied powers had formed the plan of operating on the flanks of Napoleon, and uniting in his rear. With this view, the movements of the Silesian army, under Blücher, and of the northern army, under the crown-prince Charles John of Sweden (Bernadotte), were directed to the Lower Elbe, and the movements of the main army, under Schwartzenburg, to the Upper Elbe. Circumstances finally determined the country around Leipsic, as the place where the junction should be formed, and Napoleon cut off from the Saal. In all probability, Napoleon was well aware of this project, but expected to frustrate it. A rapid march between the Mulda and Elbe, a quick passage over the latter river at Dessau, ostensibly with the view of advancing upon Berlin, were to deceive and retard the northern army, and give Napoleon time to turn against Schwartz-

enburg, and drive him to the mountains of Saxony. If he was conquered, Blücher and John were to be defeated and destroyed. In conformity with the plan of the allies, the great Bohemian army, of 120,000 men, marched, on the 12th October, in three columns, against Leipsic, over the Erzgebirge. Napoleon, meanwhile, assembled his troops in and around Leipsic. October 15, he mustered his army, and gave the generals their orders. His whole force amounted to 80,000 or 90,000 men, the corps of Ney and Regnier being still on the road, or employed, under Marmont, to cover the country to the northward. In case of an unfortunate issue, the corps of Bertrand was to secure the pass of Lindenau. Prince Schwartzenburg commanded the allied forces, although the three monarchs of Austria, Prussia and Russia, were present. His purpose was an attack, with three columns, on the position of the French. About seven o'clock in the morning of the 16th, the allied troops put themselves in motion, carried the French outposts, at the villages of Markleburg, Wachau, and Liebertwolkwitz, and evidently pressed on the enemy's position. The corps of Victor was obliged to relinquish Liebertwolkwitz to general Klenau. About nine o'clock, the battle had become general, and the thunder of innumerable pieces of artillery was scarcely ever heard so powerful and so uninterrupted by the oldest soldiers. Both parties displayed the most brilliant courage. The movement of the left wing of the allies suffered considerably from the firmness of the Poles, who resisted every attempt to cross the Pleisse, and, favored by the ground, kept up an effective fire. Napoleon ordered, in person, the battle on the heights of Liebertwolkwitz. Macdonald carried the *Swedish camp*, as it was called, by storm, and thus secured to the left wing of the French an essential advantage; but Wachau was the scene of the most obstinate conflict. From this place Napoleon attacked, repeatedly, the centre of the allies. The corps of Ney, which arrived at this juncture from Delitsch, might have decided the day, but Blücher's army also came in sight. It had pressed forward, from Halle to Skeuditz, on the 16th October, attacked the duke of Ragusa at Wahren, Lindenthal and Breitenfeld, gained a decisive victory at Möckern, after a severe resistance, and now threatened Leipsic from this quarter. Ney had, consequently, to be despatched against it, and the decisive moment was lost:

the emperor Alexander even recovered a lost battery, by the attack of his regiment of Cossack guards; the Russian grenadiers restored the balance of power between the Pleisse and Wachau; and, notwithstanding Napoleon caused the bells of Leipsic to be rung in honor of his victory, he had acquired no advantage by it, with the exception of a small portion of ground, so that the two parties were very nearly in the same position, in the evening, as before the battle. But the arrival of the northern army, which Napoleon had not in the least expected, but of which he was aware before the allies, made him desirous to retreat. On the 17th October, the arms of the contending forces were permitted to repose, by a tacit agreement; the allies waited for the arrival of their third main body, under Bennigsen, from Dresden, by way of Grimma, and Napoleon was meditating an honorable retreat, for which purpose he attempted to open negotiations with the allies, by means of the captive Austrian count Meerveldt. He is said to have proposed an armistice, demanded permission to cross the Saal without opposition, proffered the cession of the fortresses of the Oder and Vistula, and manifested an inclination for peace. From these measures, the allies ascertained his weakness, and refused to listen to the proposals, particularly as they were now informed of the arrival of the northern army, before which Ney and the duke of Ragusa retreated, over the Parde, to Schönfeld. Napoleon was thus reduced, on the 18th, to the necessity of sustaining a defensive battle, and was compelled to retreat. He took a position more in the rear, between the Pleisse and Parde, protected by several villages. The northern suburbs of Leipsic were defended by a battery, and by Dombrowski and the duke of Padua (Arrighi). Bertrand still kept the pass of Lindenau open, by which all the unnecessary wagons were quickly conveyed to Lützen. Napoleon himself took his station in the midst of his guard, at Probstheida, that he might send aid to every weak point, and be able to superintend the whole. According to their plan of the 16th, the allies aimed at a junction with Bennigsen and the northern army. They soon found themselves on a more favorable ground, which gave complete efficiency to their cannon and musketry. They gained various successes, and effected a union with Bennigsen. Notwithstanding his ill fortune, Napoleon was able to fill the chasms and repair his disadvantages; his line was nowhere broken,

nor was he ever assailed in the rear; the force of the allies was gradually exhausted, and a fair retreat seemed possible for the French; but it was difficult, on account of the want of a free passage for the columns, because all the ways leading to the western suburb of Leipsic, and beyond, to the narrow pass of Lindenau, were covered with flying baggage wagons, and troops in great confusion, and no bridges over the Pleisse had been prepared for such an event, and no precautions had been taken. It was but a short time before, that Leipsic itself had been slightly fortified, and the garden walls of the suburb, and similar objects, had been transformed into means of defence. Poniatowsky and Macdonald were now appointed to cover the retreat, which took place at daybreak, 19th October. Hardly had the allies observed that the position of the French was abandoned, when they made preparations to assail Leipsic on all sides, and, after a severe struggle, obtained possession of two gates. To give a faithful picture of the cruel confusion of this retreat, through the city and environs, would be impossible. Every moment increased the disorder of the flying army, and, the only bridge over the Elster having been blown up too soon, the flight was changed into wild desperation. But a short time before, had Napoleon himself, after taking leave of the king of Saxony and his family, reached that important bridge, not without difficulty, and by a circuitous route: 15,000 or 20,000 men, in close array, more than 200 pieces of artillery, and an immense quantity of baggage, were left, and increased the trophies of the victors. Poniatowsky's and Macdonald's bands attempted to escape over the narrow bridge of the Pleisse, and then, hemmed in again by the Elster, to construct a foot-bridge in the gardens of Reichenbach; but it was not sufficient for the mass which crowded over it. The greater part perished in the waters of the Pleisse or the Elster, in which Poniatowsky found a noble death. The rest fell by the hands of their pursuers. Macdonald escaped. By degrees the resistance slackened; the Baden troops were unable to hold the interior of the city, and the allied monarchs entered at the head of their soldiers. The loss of the French in prisoners, killed, and wounded, has been rated at 60,000 men. Among them, 3000 officers, 300 pieces of cannon, and an immense quantity of baggage, &c., fell into the hands of the allies. The battle of Leipsic is said to have cost the

victors 45,000 men (viz. 8000 Austrians, 21,740 Russians, 14,950 Prussians, and 300 Swedes). With Napoleon's defeat at Leipsic was connected a series of consequences of immense historical importance. (See the articles *Saxony*, and *Russian-German War*.)

LEISEWITZ, John Anthony; a German writer, whose tragedy *Julius of Tarentum* (1776) is esteemed by the Germans one of their best productions, and is still performed. Leisewitz was born 1752, at Hanover, and, at the university, was a friend of Voss, Hölty, Bürger. He died in 1806, at Brunswick. He burnt the manuscript of his history of the thirty years' war. His works appeared at Vienna, in 1816.

LEISTENWEIN. (See *Franconian Wines*.)

LEITH; a town of Scotland, in the county of Edinburgh, formerly called *Inverleith*, and the seaport of Edinburgh. It is divided into two districts, called *South* and *North Leith*, communicating by two draw-bridges across the harbor. The town is mostly situated on the south side of the river, and, with the exception of the modern and improved streets, is irregularly built, with narrow streets and lanes, and the houses mostly old-fashioned and inconvenient. In 1800, a magnificent suite of wet docks was planned, and two of these beautiful basins are now opened for shipping. These docks, comprehending nearly eight acres, together with three graving docks, have cost about £250,000. Fortifications were erected by Oliver Cromwell in North Leith, called the *citadel*, for the purpose of defending the harbor, which were afterwards demolished. There is a martello tower about a quarter of a mile from the pier. Leith carries on an extensive trade with the Baltic, and other countries of Europe, such as Holland, France, Spain, Portugal, and the Mediterranean; also with the West Indies and America; besides a great coasting trade to the different parts of England and Scotland. A trade has also commenced with New South Wales, with which distant colony a regular intercourse is maintained. The Greenland fishery is also prosecuted with great activity. It has extensive rope-works, and various other manufactories. Ship-building is carried on to a considerable extent; and there is an extensive distillery in the neighborhood. The town of Leith is rapidly extending itself. Population, 26,000; two miles north-east Edinburgh. The two towns are now, however, nearly joined, by a confused range of buildings.

LEKAIN, Henry Louis; tragic actor, born at Paris, in 1728. It was the intention of his father, a goldsmith, to bring him up in the same avocation, in which the boy made such progress, that his work was in request even in his 16th year. He enjoyed, at the same time, the benefit of instruction in the *collège de Mazarin*, where the scholars performed a dramatic piece at the close of the academic year. The means of Lekain were inadequate to the expense required of the performers, and he therefore undertook the office of prompter. He rarely had occasion to make use of the book, so deeply were the plays impressed on his memory, as soon as he had heard them a few times. His greatest recreation consisted in attending the French theatre on Sundays. Social amusement having acquired new life in Paris, after the peace of 1748, several private theatres were formed, and Lekain joined with a number of young persons in establishing one, which soon surpassed all the others. Lekain was distinguished for his acting, and Arnaud Baculard's comedy *Le Mauvais Riche* was first performed by this company. Voltaire, Arnaud's patron, was present at the representation, and invited Lekain, who played the part of the lover, to his house. The young actor was embarrassed before this celebrated man, who encouraged him with the words, "Heaven be thanked, I have at last found a person who has moved and touched me, even when reciting bad verses." Voltaire advised him, however, not to become an actor, and, in order to induce him not to abandon the trade of his father, offered to advance him 10,000 francs, in order to place him in a more convenient situation. Lekain hesitated, but his propensity for the stage predominated. When Voltaire perceived that the resolution of the young man was invincible, he offered to spare him, at least, the expense of apprenticeship, and to build him a theatre in his own house, where Lekain could play with his young friends. Lekain now lived with Voltaire, whose two nieces played with him, and the poet himself sometimes undertook a part. The most distinguished men aspired to the honor of attending these performances. The part of Cicero, in the *Rome Preserved*, was here seen represented by Voltaire, with an energy and truth, of which tradition still preserves the memory, and, inspired by such a model, Lekain shone in the character of Titus. During the six months which he spent in the society of Voltaire, his dramatic skill was vastly improved, and, in his *Mémoires*

de H. Lekain, published by his son (Paris, 1801; new edition, *Précédés de Réflexions sur cet Acteur et sur l'Art théâtral, par Talma*, Paris, 1825), he says that, at that time, he studied most profoundly the principles of his art. Before departing for Berlin, in 1750, Voltaire obtained for his protégé permission to appear on the *théâtre Française*. One of his most splendid parts was Mahomet, in Voltaire's play of the same name. Voltaire called him the only truly tragic actor. His last performance, in the character of Vendome, in Voltaire's *Adélaïde*, was admired above all, and the exertions which he made, on this occasion, were the prime cause of his speedy death, in 1778. An inflammatory fever brought him to the grave in a few days. On the day of his death, Voltaire returned to Paris, after an absence of 30 years, and the first news which he learned was the distressing information of the death of his protégé.

LELAND, John; an English antiquary, born in London, about the end of the reign of Henry VII. He was educated at St. Paul's school, and Christ's college, Cambridge, whence he removed to Oxford, and then to Paris, for further improvement. Returning home, he took holy orders. Henry VIII made him his chaplain and librarian, and gave him the title of royal antiquary. In 1533, he was empowered, by a commission under the great seal, to search for objects of antiquity in the archives and libraries of all cathedrals, abbeys, priories, &c.; in consequence of which, he spent six years in travelling over the kingdom, visiting the remains of ancient buildings and monuments, and collecting materials for the illustration of the history and archæology of England and Wales. He retired to his house in London, to arrange and methodize the stores of intelligence which he had collected, but, after about two years, died insane, in 1552, without having completed his undertaking. The great bulk of his collections, after passing through various hands, was placed in the Bodleian library, in an indigested state. Hearne printed a considerable part, forming the *Itinerary of John Leland* (9 volumes, 8vo.), and *Lelandi Antiquarii de Rebus Britannicis Commentaria* (6 volumes, 8vo.).

LELY, sir Peter, a celebrated painter, was born at Soest, in Westphalia, in 1617. His father, a native of Holland, whose family name was Van der Vaes, was a captain in the garrison of that town, but, having acquired the nick-name of captain Le Lys, or Lely, his son retained it as a

proper name. He was first instructed by Peter Grebber, at Haerlem, and, attracted by the encouragement afforded to the arts by Charles I, he went to England, in 1641, and commenced portrait-painter. He finished portraits both of that monarch and of Cromwell; but it was not until the restoration, that he rose to the height of his fame and prosperity. He fell in with the voluptuous taste of the new court, in his representation of the beauties who adorned it, and, by the delicacy and grace of his pencil, became the favorite ladies' painter. He has transmitted the features of most of the beauties of the court of Charles II, and is particularly admired for the grace of the heads and the elegance of the draperies. He was in great favor with Charles II, who knighted him. He died in 1680. The "beauties" at Windsor, by him, are much admired. He likewise excelled in crayon painting. His historical pictures are few. At Windsor, there is a Magdalen and a sleeping Venus. The duke of Devonshire has his Jupiter and Europa; lord Pomfret, his Cimon and Iphigenia. (See Walpole's *Anecdotes of Painting*.)

LEMAN, or LAC LEMAN; the name of the former French department, comprehending the republic of Geneva from Lemanus, the ancient name of the lake of Geneva.

LEMBERG, or LEOPOLIS (in Polish, *Lwow*); capital of the kingdom of Galicia, with 47,500 inhabitants, of whom 18,249 are Jews; next to Brody, the most important commercial place in the circle of the same name. It is the seat of the Austrian provincial government. Lon. 24° 2' 53' E.; lat. 49° 51' 42' N. Lemberg is the see of a Roman Catholic, a Greek Catholic, and an Armenian archbishop, and is the seat of the Lutheran superintendent, and of the chief rabbi. There were formerly 33 convents at Lemberg, of which 10 only now exist. It has, also, a university, which was transferred to Cracow, but, in 1817, was reestablished (26 professors and 220 students). There are several high schools, two theological seminaries, &c. The Ossolinsky library is public. Lemberg is 68 leagues east of Cracow, is fortified, and carries on considerable trade.

LEMERCIER, Népomucène Louis, member of the French academy, poet, and, perhaps, the most talented dramatic writer of our time in France, born at Paris, in 1770, wrote a tragedy, *Meleager*, in his 16th year, which, however, survived but a single representation. Others soon followed, some of which obtained permanent success;

e. g. his *Agamemnon*, his *Pinto*, Christopher Columbus, *La Journée des Dupes*, &c. Besides these plays, his *Cours de Littérature*, and his philosophical satirical poem *La Panhypocrisiade*, have excited much attention. A character like his, the object of whose exertions was to produce a warm opposition to abuses, must necessarily have encountered much hostility; but he was most persecuted by the censorship, as a dramatic poet. Lemer cier finally gave vent to his displeasure in a very popular satirical prelude to his comedy *Le Corrupteur*, which, under the title of *Dame Censure, ou la Corruptrice* (Paris, 1823), scourges, with the keenest irony, the meanness and odiousness of this institution for fettering the mind. Lemer cier has produced about 30 tragedies, comedies, and other dramatic productions for the stage, exclusive of his other works, in verse and prose. His last historical drama, in five acts, *Richard III et Jeanne Shore* (Paris, 1824), from Shakspeare and Rowe, is planned with much genius, but does not meet with the applause, in Paris, that is bestowed on the *Jane Shore* of the young poet Liadières. Lemer cier's poetry does not please tastes formed on the rules of Aristotle and Boileau. He has frequently disregarded the French system of the unities, particularly in his *Columbus*. He does not polish his verses with sufficient industry, and is, therefore, by no means a universal favorite with his countrymen; and only one of his tragedies has been preserved on the French theatres—his *Agamemnon*. His comedies are always unsuccessful. In 1825, he published two volumes of *Chants héroïques et populaires des Soldats et Matelots Grecs, traduits en Vers Français*. His tragedy *Les Martyrs de Souli, ou l'Épire moderne*, in five acts (Paris, 1825), has never been performed.

LEMIERRE, Antoine Marin; a French dramatist, born in 1733, at Paris. He received a good education, but, being deprived of his parents while young, he became assistant sacristan to the church of St. Paul. At his leisure, he composed sermons for sale in manuscript—a circumstance which made him known to the abbé D'Olivet, who employed him to correct the proofs of his edition of Cicero. He was then made an under master of rhetoric at the college of Harcourt, in which situation he wrote a tragedy, rejected at the theatre. He afterwards gained six poetical prizes, offered by provincial academies. His tragedy of *Hypermnestra* was acted with success in

1758. He subsequently obtained a place in the office of a farmer-general, who, perceiving that he was better qualified to make plays than to keep financial accounts, generously bestowed on him a pension, that he might be enabled to devote himself to literature. In 1781, he was chosen a member of the French academy; and he died in 1792. He produced several tragedies, among which the best and most successful were his *Widow of Malabar*, and *William Tell*: he also published *Les Fastes, ou les Usages de l'Année*, a poem in 16 cantos; and a collection, entitled *Pièces fugitives* (1782, 8vo.).

LEMMA, in mathematics, denotes a preliminary proposition, laid down in order to clear the way for some following demonstration, and prefixed either to theorems, in order to render their demonstration less perplexed and intricate, or to problems, to make their solution more easy and short.

LEMMING (*georychus*, Illig.). These quadrupeds, which are of the rat kind, are distinguished by the conformation of the fore feet, and the shortness of the tail. The fore feet are adapted for burrowing. The tail is shorter than the body. Among the species, the most interesting are the lemming rat (*G. lemmus*) and the Hudson's bay lemming (*G. Hudsonius*). The former of these inhabits the northern parts of Europe, is about the size of the common rat; of tawny color variegated with black, the sides of the head and the under parts being white. The legs and tail are grayish, and the under parts of the body of a dull white. The head is large, short, and thick; the eyes small; the limbs stout. They feed entirely on vegetables. They form shallow burrows, in summer time, under the ground, and, in winter, make long passages under the snow in search of food. The most extraordinary characteristic of these animals is their migrations, which they undertake at irregular epochs, seeming to be guided by the severity of the approaching winter. In these emigrations, they assemble in incredible numbers, and always march in a straight line, nothing seeming to turn them aside. If they are disturbed whilst swimming over a lake or river, they will not recede, but swim on, and soon reassume their former order. They chiefly move at night, or early in the morning, and make such a destruction among the herbage, that the surface of the ground over which they have passed appears denuded. Exposed as they are to every attack, and destroyed in attempting to cross rivers and lakes, the diminu-

tion of their numbers is very great, so that few return to their native haunts. They never enter dwellings, but keep in the open air. When enraged, they raise themselves on their hind feet, and utter a barking sound. Sometimes they divide into two parties, and attack each other. They breed several times in the year, producing five or six at a birth. Their numbers are so great in particular years, that the common people, in Norway, believe that they descend from the clouds. From the devastations which they commit, they are often exorcised by the Roman Catholic clergy.* Their flesh is not used as food, nor the skins for the fur. The *Hudson's bay lemming* is of an ash color, with a tinge of tawny on the back, having a dusky stripe along its middle, and a pale line on each side. The hair is very fine, soft and long. It is not certain that these animals migrate like the foregoing species, though, from the observations of captain Lyon, this appears probable. He says that he observed long ridges of mouse dung, several inches deep, extending for above two miles. This was in a situation in which none of these animals were then found, and in a kind of soil in which they do not live. Hearne thinks that, from appearances, they seldom stray far from their habitations, even in summer, and, in winter, are rarely seen on the surface of the snow. This writer, however, may have only had an opportunity of observing them during those years in which they are stationary. They were first described by Forster, from a mutilated specimen, and afterwards, in a fuller manner, by Pallas. Doctor Richardson (*Fauna Am. Boreal.*) is of opinion that this lemming is only found in the vicinity of the sea. It occurs in Labrador, and all parts of Northern America bordering on the Polar sea. It is said to be very inoffensive, and so easily tamed that, if caught, even when full grown, it will become perfectly reconciled to its situation in a day or two, very

* The following is the form of the exorcism used:—“Exorcizo vos pestiferos mures per Deum Patrem † omnipotentem, et Jesum † Christum filium ejus, et Spiritum Sanctum, † ab utroque procedentem, ut confestim recedatis ab his campis, seu vineis vel aquis, nec amplius in eis habitetis, sed ad ea loca transeat, in quibus nemini nocere possitis, et ex parte omnipotentis Dei, et totius curiæ cœlestis, et ecclesiæ sanctæ Dei, vos maledicens, quocunque ieritis, sitis maledicti, deficientes de die in diem in vos ipsos, et decrescentes quantum reliquiæ de vobis nullo in loco inveniatur, nisi necessariæ ad salutem et usum humanum, quod prestatere dignetur ille, qui venturus et judicare vivos et mortuos et seculum per ignem. Amen.”

fond of being handled, and will creep, of its own accord, into its master's bosom.

LEMNOS (now *Stalimene*), the most northerly island of the Grecian Archipelago (the *Ægean sea*), between the Hellespont and mount Athos (147 square miles, 8000 inhabitants), abounds in vines, wheat, &c. It formerly contained a volcano, *Meschica*, which was regarded as the workshop of Vulcan. Mythology assigns this island as the residence of Vulcan (whence he is called *Lemnius*), after Jupiter had hurled him from Olympus. Various atrocities, perpetrated on this island (see *Hypsipyle*), gave occasion, in antiquity, to the use of the epithet *Lemnian*, to designate such acts. Among its curiosities are a labyrinth, and the Lemnian earth (*terra sigillata*).

LEMOINE, Francis, a historical painter, born at Paris, in 1688, was placed, in his 13th year, with the painter Galloche, with whom he remained 12 years, during which time he paid particular attention to the works of Carlo Maratti and Pietro di Cortona. In 1718, he became member of the academy. The war of the Spanish succession preventing the support of young artists at Rome, by the French government, he was obliged to defer the accomplishment of his wish to visit Italy till a rich amateur, by the name of Bergier, took him for his companion, in 1723; but a residence of six months in Italy, at a time when his talents were already developed, could not be so useful to him as the earlier study of the treasures of Roman art might have been. He finished, however, one of his best paintings, a female entering the bath, during his residence in Bologna, Venice and Rome. On his return, he was appointed professor at the academy, and soon found an opportunity of displaying his talents in painting the chapel of the Holy Virgin in the church of St. Sulpice, the subject of which is the ascension. The composition of the picture, however, has some fundamental faults. It was restored by Callet in 1780, and cannot therefore be now considered as Lemoine's work. Lemoine subsequently painted the ceiling in the hall of Hercules at Versailles, the largest painting in Europe, being 64 feet long and 54 broad, without being divided by any architectural interruptions. It contains 142 figures. He had almost finished the work, when he observed that the main group was placed a little too low, and he did not hesitate to raise it, although alterations were thus rendered necessary in almost all the other figures. His exertions in this work, which cost him the

labor of seven years, weakened his health. His domestic misfortunes augmented the natural gloom of his disposition, and his chagrin at the marks of favor conferred on inferior artists combined with these circumstances to unsettle his reason. In a fit of insanity, he put an end to his life, in 1737. On an unprejudiced estimate of his labors, it cannot be denied, that the decline of the French school is principally owing to him. His drawing is incorrect, his forms are disfigured by mannerism, but his coloring is brilliant, though wanting in truth, and his grouping is skilful.

LEMON. The lemon-tree (*citrus limonum*) was originally brought from the tropical parts of Asia, but is now cultivated very extensively in the south of Europe, especially in Sicily, and the fruit forms an important article of commerce. It is congeneric with the orange and citron, and belongs to the natural family *aurantiaceæ*. Its stature is that of a large shrub or small tree; the leaves are oval, pointed, twice as long as broad, and, like those of the other species, contain scattered glands which are filled with a volatile oil. The beauty of its smooth evergreen foliage, and the delightful fragrance of the flowers and fruit, have made it a great favorite in all our green-houses. The shape of the fruit is oblong, but its internal structure does not differ from that of the orange. The juice is acid and agreeable; mixed with water and sugar, it forms the well-known refreshing drink called *lemonade*, which is in general use throughout all parts of the civilized world. Lemon-juice is also employed by calico printers to discharge colors. (See *Citron*.)

LEMONADE; a drink made of water, sugar, and the juice of lemons. Prepared in this simple way, it is a very grateful beverage in warm weather, or to feverish patients. The taste is more agreeable, if the sugar is rubbed with the peel of the lemon, so as to imbibe the oil contained therein; but the lemonade is thus rendered stimulant rather than cooling, and many persons suffer from headache in consequence. In public houses, cream of tartar is frequently used instead of lemon-juice, which few persons can endure without feeling some head-ache. Lemonade was first sold publicly between 1630 and 1633, in Italy, and soon became very common. (See *Limonade*.)

LEMONTEY, Peter Edward, member of the French academy, jurist and poet, was born at Lyons, in 1762, and died at Paris, June 27, 1826. On the convocation of the estates in 1789, he contributed by his

essay—Whether a Protestant can vote in the Election of the Members of the Estates, or be chosen a Member himself—to the restoration of the Protestants, who formed a numerous class of citizens, to their civil rights. Subsequently appointed deputy from the department of the Rhone, he joined the constitutional-monarchical party, and exerted himself to moderate the extravagant measures of the wild demagogues. He succeeded in saving a great number of absent scholars, artists and travellers from being confounded, in the laws against emigrants, with those who had left their country with the purpose of introducing foreign arms on their native soil. In the deliberations on the fate of Louis XVI, he conducted with equal humanity and courage. During the reign of terror, Lemontey fled to Switzerland, whence he did not return till after the overthrow of the Mountain party. Deeply affected with the calamity which had involved his native city in ruin (see *Lyons*), he published his beautiful ode *Les Ruines de Lyon*. He afterwards travelled through Italy, published several poetical works in Paris, and wrote various operas and romances. In 1804, the government conferred on him, and two other literary men, the censorship of theatrical works—an ungrateful office, which he at first exercised with much discretion, but in which he subsequently exposed himself to the complaints of authors. After the restoration, he received the order of the legion of honor, and the office of director-general of the book-trade. He also succeeded Morellet in the academy. His romance *La Famille de Jura ou irons-nous à Paris?* (written on occasion of Napoleon's accession to the throne), in four months passed through as many editions. His *Essai sur l'Établissement monarchique de Louis XIV* (his master-work, bold and true) was an introduction to his unfinished *Histoire de la France depuis la Mort de Louis XIV*. Of his operas, *Palma, ou le Voyage en Grèce*, was very successful during the revolution, because he boldly attacked in it the Vandalism of those times—the destruction of the French monuments of art, under the name of *civism*.

LEMOT, Francis Frederic, member of the institute, sculptor, professor in the royal academy of the fine arts, at Paris, born at Lyons, in 1773, devoted himself to the study of architecture in the academy of Besançon, and, when scarcely 12 years of age, prosecuted his studies in Paris. The contemplation of the master-works of sculpture, in the capital, awoke in him the love of this art. As he was one

day in the park of Sceaux, drawing the statue of Hercules, by Puget, some academicians, among whom was the staturary Dejoux, happened to be present. Astonished at seeing a boy of his age so profoundly engaged, they entered into conversation with him, and, learning that he had come to the capital on foot, to seek instruction, Dejoux took him under his care. In 1790, when but 17 years of age, he gained the prize of the academy for a bass-relief. Louis XVI granted him a pension, by means of which he pursued his studies in Rome; but, in consequence of the revolution, this supply was cut off, and Lemot, embarrassed by the greatest poverty, went from Rome to Naples, and thence to Florence. He finally ventured, at the advice of the French minister at Florence, Cécault, to return to his native country, to solicit assistance of the existing government in behalf of himself, and of several other young French artists, in similar circumstances. Exposed to great dangers—for, in Italy, he was regarded as a revolutionist, and, in France, as an emigrant—he reached Paris, but obtained what he asked only for others, being himself obliged to enlist, as a soldier, in the army of the Rhine, where he fought under Pichegru. He was stationed at the outposts, when he received orders to return to Paris, and construct the model of a bronze statue, 50 feet in height, which was to be erected on the square of the Pont Neuf. This statue was to represent the French nation under the image of Hercules. The commission, appointed for the purpose, approved Lemot's model. Political circumstances, however, prevented its execution; but Lemot made himself familiar with the art of casting in bronze, and this knowledge was afterwards of great service to him, in preparing the statue of Henry IV, which he executed at the command of Louis XVIII. Lemot's principal works are his statues of Lycurgus, Solon and Cicero, in marble; his two bass-reliefs, for the hall of the chamber of peers; his colossal bust of Jean Bart; a Hebe offering a full goblet to Jupiter; a statue of king Joachim Murat; the great frontispiece of the colonnade of the Louvre; a girl sleeping; the triumphal car and Victory, which, with the horses of St. Mark's square, in Venice, adorned the *place du Carrousel*, in Paris, till the restoration of the monuments of art; and the above-mentioned equestrian statue of Henry IV in bronze. His excellent sculptures on the triumphal arch at Chalons-sur-Marne, were destroyed, in

1814, with the rest of the monument. His last work was the colossal equestrian statue, 17 feet high, of Louis XIV, in heroic costume, for the city of Lyons, in 1824. Lemot's works are characterized by a pure and severe taste, richness of invention, and vigor of execution. Under the imperial government, he received the order of the legion of honor, and, in 1817, that of St. Michael. He also wrote the *Notice historique sur la Ville et le Château de Chiffon, ou Voyage pittoresque dans le Bocage de la Vendée* (Paris, 1817, 4to.). Lemot died at Paris, in May, 1827.

LEMPRIERE, John, D. D., was graduated at Oxford as A. M., in 1792. In the same year, he became head-master of Abingdon grammar-school, and afterwards master of the free grammar-school at Exeter. In 1811, he was presented to the rectory of Meeth, Devonshire, which living, together with that of Newton Petrock, in the same county, he held till his death. Doctor Lempriere was an excellent classical scholar, and published a *Bibliotheca classica* as an assistant in the study of antiquities and mythology. His other writings are the first volume of a translation of Herodotus, with notes, which appeared in 1792: an entire and elegant translation of that historian being given to the world by Mr. Beloe, doctor Lempriere desisted from prosecuting his design. A compilation of Universal Biography, first printed in quarto, with an abridgment of the same, in octavo, both in 1808, was his last work. He died of apoplexy, Feb. 1, 1824.

LEMUR. This genus of the monkey tribe (the *makis* of Cuvier) has been divided into several subgenera; as, *Lemur*, which is distinguished by having six projecting incisors in the lower jaw and four straight ones in the upper. These animals have long tails, and take the place of apes in the island of Madagascar, none of the latter being found there. *Indris*, having four incisors below and the same number above; no tail; only one species known, which the inhabitants of Madagascar tame and train to the chase, like dogs. *Loris*, four incisors below, and four above; no tail. Their molar teeth have sharp points instead of tubercles, and they sometimes feed on small birds and quadrupeds. *Galago*, having six incisors below and four above; tail long and tufted; elongated tarsi to the hind feet, which render them very disproportionate to the superior extremities. *Tarsius*, four incisors above, two below, and several canine teeth between the incisors and molars; tail long, tufted. All these animals

have their thumbs strongly developed, and the first finger on the hinder feet furnished with a pointed and elevated nail, all those on the other fingers being flat. Their hair is woolly.

LEMURES (*manix, lamix*, ghosts, spectres), among the ancient Romans; the souls of the dead, which tormented men in the night, whence they were called *nocturnal* or *black*. In order to lay them, a ceremony called *lemuria, lemuralia, remuria*, was observed on the nights of the 9th, 11th, and 13th May. About midnight, when every body was asleep, the head of the family rose, and went, barefooted, softly and in silence, to a fountain. With a snap of the fingers, still keeping silent, he protected himself from the spectres. Having washed his hands at the fountain, he returned, took some black beans in his mouth, and, without looking around, threw them nine times over his head, repeating, each time, *Hæc ego mitto; his fabis me meosque redimo* (These I send; with these beans I redeem me and mine). He then washed his hands again, struck a hollow copper vessel, saying nine times during the operation, in a supplicating tone, *Manes, exite, patrum* (Ye souls of my ancestors, depart). He now looked around, and the ceremony was finished. It was believed that the spirits came and collected the beans.

LENA; a large river of Asiatic Russia, which rises in the mountains near lake Baikal, and empties, after a course of about 2000 miles, through four arms, into the Northern ocean, after having received the Wilime, Olekma, Aldane and Wilhoui. It forms, at its mouth, a large bay, of the same name, containing many islands, called the *archipelago of the Lena*, which are cold and barren, but inhabited by many animals valuable for their furs.

LENCLOS, Anne, called *Ninon de*, the French Aspasia, was born at Paris, in 1616, of noble parents. The early death of her parents having left her to follow her inclinations, her character was formed by the bent of her own feelings, and by the study of the works of Montaigne and Charron. Even at an early age, she was distinguished for her wit and acuteness. She played the harpsichord and several other instruments in a masterly style, sang with taste, and danced with grace. With such attractions, she had no want of lovers and suitors; but her love of independence prevented her from forming a serious connexion. To render herself entirely free, she invested her property in an annuity, on which she lived frugally, but in good style.

Her income amounted to 8000 or 10,000 livres. Without making a traffic of her charms, she attached herself to those who pleased her, as long as her inclination continued. Inconstant in love, but true in friendship, equable in her temper, charming in her conversation, capable of forming young men, but also of seducing them, sensible, without making a display of her powers, handsome even in old age, she wanted nothing but female virtue, yet she conducted herself with dignity. She never accepted presents in return for her favors, though she gave herself up, from blind sensuality, to transient passion, without concerning herself whether its object was worthy of her. Having extended her favors, in succession, to the most celebrated men of her time, she proved to all, that mere sensual desire, and not vanity, was the cause of her passion. Notwithstanding her reputation for gallantry, the most amiable and respectable ladies of the time, such as La Fayette, La Sablière and Maintenon, cultivated her friendship. Of madame de Maintenon she used to say, that she wished to employ her to drive away the tedium of rank and age at Versailles. Even in her old age, her house was the rendezvous of the most agreeable personages of the city and court, and of the most distinguished men. Scarron consulted her on his romances, St. Evremont on his poems, Molière on his comedies, Fontenelle on his dialogues, and La Rochefoucault on his maxims. Coligny, Condé, Sévigné, &c., were her lovers and friends. When the queen of Sweden was in Paris, she paid Ninon a visit. Voltaire speaks of her as having lost her charms of person in extreme old age. St. Evremont maintains the contrary. At her death, Oct. 17, 1705, she bequeathed to Voltaire, then a young man, whose renown she had foreseen, a considerable sum, which he was to expend in books. One of Ninon's sons, named La Boissière, died, in 1732, at Toulon, an officer in the navy. His birth was distinguished by a dispute between an officer and clergyman respecting the paternity. As the matter was doubtful, it was decided by lot, and the officer obtained the paternal title. Ninon's second son died a tragic death. He had fallen in love with his own mother, without knowing his relationship to her. She was obliged to reveal the secret to him, to escape his importunities, and he killed himself from despair. This terrible event has been introduced, by Le Sage, into his *Gil Blas*. Ninon, moreover, confessed herself, that she was not happy, and often

said, that, if she had foreseen her course of life, she would rather have undergone a voluntary death, than have submitted to such a destiny. The *Lettres de N. de Lenclos au Marquis de Sévigné* are the work of Damours, the author of the life prefixed to the collection. The *Correspondance secrète de, &c.*, edited by Ségur (1789), is also a supposititious work.

LENNI LENAPE. (See *Indians*, and *Indian Languages*.)

LENOIR, Alexander, born at Paris, in 1762, rendered the greatest services to the fine arts, by the preservation of the monuments of French art, while director of the French museum of antiquities. He received his education in the *collège Mazarin*, and afterwards in the academy of arts at Paris. He subsequently devoted himself to painting till 1790, under the guidance of the painter-royal Doyen. In the beginning of the revolution, when the finest works of art, preserved in monasteries and palaces, were destroyed, from hatred of the former despotism in church and state, Lenoir determined to save all that he could. He made a proposal, through Bailly, then mayor of Paris, to collect all the treasures from the monasteries, &c., in a grand national museum. Intrusted with the execution of the project, Lenoir engaged in the matter with so much zeal, that his life was several times endangered by his exertions to rescue these treasures from the fury of the new iconoclasts. As he travelled through all France for this purpose, he succeeded in preserving, for posterity, a great part of those monuments which afford the artist an opportunity to compare the progress of art in different periods. By the union of these remains, was formed the famous museum of French antiquities, in the *Rue des Petits Augustins*, which Lenoir superintended, for almost 30 years, with uninterrupted industry, so that it may justly be said, that to him France is indebted for whatever of this kind it now possesses. After the restoration, the collection was distributed by the royal mandate of 1816, to the former proprietors, i. e. to the churches and revived monasteries, and the national museum was broken up; but Lenoir was appointed superintendent of the cabinet of the cathedral of St. Denis. His investigation into the Costumes and Manners of Antiquity, and his essay on the remains of Western and Eastern art in general, are much esteemed; so also are his *Observations sur la Peinture sur Verre et sur ses différents Procédés* (Paris, 1824), and his work *La vraie Science des Artistes*,

en *Corps complet de Doctrines sur les Arts dépendants du Dessin* (Paris, 1823). He has given a description of the museum, as it existed under his care, in his *Musée des Monuments Français* (8 vols.), which has been translated into English, and to which belongs the collection of engravings, in 22 plates, prepared under his inspection.

LENORMAND, Mademoiselle. This Parisian prophetess, well known in the very highest circles of society, for foretelling events from coffee-grounds, cards, &c., acquired a reputation by her dexterity and cunning. During the imperial government, her saloon—for this sibyl lived in high style—was visited by the most noble ladies; but, as she meddled in political affairs, this Pythia of the nineteenth century was banished from the country. Enraged at her exile, Mademoiselle wrote the *Souvenirs prophétiques d'une Sibylle sur les Causes de son Arrestation, le 11 Décembre, 1809*, which she delayed publishing, however, till after the restoration. In this *post factum* prophecy, the overthrow of the tyrant of the world and his faction, and the triumph of legitimacy, were announced. A severe criticism, by Hoffmann, on this work, which had been well received by a certain class, involved the irritable authoress in a war of words. Since her return to France, she has published several *Oracles Sibyllins*. Her *Mémoires historiques et secrets de l'Impératrice Joséphine*, her patroness (Paris, 1820, 2 vols.), excited much attention. (See *Joséphine*.) During the congress of Aix-la-Chapelle, Mlle. Lenormand was there, and is said to have enjoyed the protection of a great potentate. She gives her account of this in her work *De la Sibylle au Congrès d'Aix-la-Chapelle, suivi d'un Coup-d'Œil sur celui de Carlsbad*. In her latest writings, she has disclosed the simple principles of her divinations—*Le mois, et le quantième de la naissance, l'âge, les premières lettres des prénoms et du lieu où l'on est né, la couleur favorite, l'animal préféré, celui qu'on hait, la fleur de choix*.

LENOTRE, Andrew; a French architect and ornamental gardener. He was born at Paris, in 1613, and was the son of the superintendent of the gardens of the Tuileries, who, wishing to make him an artist, placed him, as a pupil, with Vouet, the painter. He showed a strong taste for design, particularly in laying out gardens, and arranging their scenery. He first displayed his talents at the château de Vaux; but his plans for the decoration of the park of Versailles contributed principally to establish his reputation. He af-

terwards embellished the gardens of Clagny, Chantilly, St. Cloud, Sceaux, the Tuileries, &c. Louis XIV richly rewarded the labors of Lenotre, and, in 1675, bestowed on him letters of nobility, and the cross of the order of St. Michael. He took a journey to Italy in 1678; and, at Rome, he was honorably received by pope Innocent XI. He died at Paris, in 1700. Delille has celebrated the talents of Lenotre, whose style of ornamental planting was fashionable, not only in France, but in England, till it was superseded by the designs of Kent, Brown, and the modern landscape gardeners.

LENS, in dioptrics, properly signifies a small roundish glass, of the figure of a lentil, but is extended to any optic glass, not very thick, which either collects the rays of light into a point, in their passage through it, or makes them diverge, according to the laws of refraction. Lenses have various figures, that is, are terminated by various surfaces, from which they acquire various names. Some are plane on one side, and convex on the other; others convex on both sides, both of which are ordinarily called *convex lenses*, though, where we speak accurately, the former is called *plano-convex*. Again, some are plane on one side, and concave on the other; and others are concave on both sides; which are both usually ranked among the concave lenses; though, when distinguished, the former is called a *plano-concave*. Others, again, are concave on one side, and convex on the other, which have the name *meniscus*. In every lens, terminated in any of the fore-mentioned manners, a right line, perpendicular to the two surfaces, is called the *axis of the lens*, which axis, when both surfaces are spherical, passes through both their centres; but if one of them be plane, it falls perpendicularly upon that, and goes through the centre of the other. (See *Optics*.)

LENT, a Teutonic word; in German, *Lenz* (the spring); in Swiss, *Glentz*; in Dutch, *Lent*. Several derivations of the word have been proposed. Adelung thinks that it is probably connected with the German verb *leinen* (to thaw). In English, *Lent* means the quadragesimal fast in spring, which, in Italian, is called *quaresima*; in French, *carême*, from the Latin *quadragesima*. In the article *Fasts*, the subject of fasting, in general, and the fasts and days of abstinence observed by the Roman church, have been treated of. Lent is a fast intended to prepare Christians for the Easter festival. Protestants generally consider Lent not to have been

established before the second or third century; but the Catholic church maintains, with St. Jerome, St. Leo, St. Augustine, and the majority of the fathers of the church of the fourth and fifth centuries, that it is of apostolic origin. They reason thus: that which we find universally established in the church, and of which we cannot, nevertheless, find the institution by a council, must have been established by the apostles; and the 69th apostolical canon, the council of Nice, in 325, that of Laodicea in 365, and the fathers of the second and third centuries, speak of Lent as a usage generally observed by the church. In the Latin church, Lent formerly lasted but 36 days; in the fifth century, four days were added, in imitation of the 40 days' fast of the Savior, and this usage became general in the Western church, except in the church of Milan. (See *Dictionnaire de Théologie*, article *Carême*.) The Greeks begin Lent one week sooner than the Roman Catholics, but they do not fast on Sundays, except in passion-week, though their fasts, generally speaking, are much more strict than those of the Roman Catholics. The Latin monks had formerly three fasts, of 40 days each; and the Greeks observed four besides Lent; but they have reduced them to seven days each. Some Oriental sects had still other great fasts. The eighth council of Toledo, in 653, orders that those who break the fast, without necessity, shall eat no meat during the whole year, and shall not partake of the Lord's supper at Easter. The bishop must give the sick and aged permission to eat animal food during Lent. Such permissions are, however, generally put into the hands of physicians, from whom it is not difficult to obtain them. Until the year 1200, but one meal a day was eaten during Lent. The close of Lent is celebrated in Catholic countries with great rejoicings. In Rome, the *pizzicaruoli*, or shops in which hams, sausages, eggs, &c., are sold, are illuminated and ornamented, in the most picturesque manner, the night before, in order to attract buyers. The statue of a saint, made of butter, is often seen. Heaps of eggs are multiplied endlessly by reflecting mirrors, and the whole scene is quite brilliant and attractive. Milk is allowed during Lent. The English church has retained Lent, and many other fasts, but gives no directions respecting abstinence from food. (See *Carnival*.)*

* Though Lent is established to subdue our animal appetites, and to induce us to live more spiritually, the following remark is found in the

LENTIL; a species of *eryum*. The common lentil comes from France and the Valais. The thin annual root brings forth weak, creeping, hairy, angular stalks, from one to two feet long, divided, from near the bottom, into several branches, and clinging for support to other plants; the pinnate leaves stand alternately; from the axils of the leaves proceed fine stalks, which each have two or three whitish flowers, hanging down. The pods do not contain more than two sound seeds, flat upon both sides. Lentils are cultivated for the seeds just mentioned. They require a rather sandy, yet strong soil; they are sown somewhat later than peas and vetches, because they cannot endure night frosts; they are to be sowed in drills, and well harrowed. Care is to be taken that the seed is not put too deep into the ground, and that the young plants are well hoed and well weeded. For the harvest, the time is to be chosen when the little pods begin to turn brown, though the plant may be still quite green; and, if possible, it is best to choose the afternoon of a dry, warm day; for if the pods are quite ripe, or are wet with rain at the time of gathering, they easily crack open, and a great loss of seed takes place. Two varieties are cultivated—the large *garden lentil*, and the common *field lentil*. The former is distinguished by its size, and the greater quantity of mealy substance which it will afford. The straw of lentils is good food for cattle and sheep, particularly for calves and lambs. Lentils are also mixed with vetches, and sowed as food, both green and dried, for milch kine. Lentils, when cooked, afford a nutritious food (this should be done in the pod, to preserve their flavor), but, like peas and beans, are not good for persons whose digestive powers are weak, particularly if they are not cooked quite soft. They ought to be boiled for two hours and a half. When they are browned, some butter, and a few onions roasted in butter, are added, also salt; they are then boiled half an hour more. A good soup may also be made of them. Some persons soften the lentils, before cooking, in cold water. Purified rain water is best to cook them in. In the Archipelago, they are one of the principal articles of food. To fatten pigs, lentils are excellent, and, given with other food, increase the milk of cows.

Catholic work quoted above: "If the rich would add alms to the fast, as the church prescribes, the poor would live better, and more comfortably, during Lent, than in any other season of the year, and would bless God for this salutary institution" (p. 554, vol. i, *Dict. de Théologie*, Toulouse, 1817).

LENTO (*Italian, slow*); a term used in music.

LENTULUS; the name of one of the most illustrious families in Rome, several individuals of which distinguished themselves by their virtues and services; others were conspicuous in other ways. Publius Lentulus Sura, an accomplice of Catiline, was strangled in prison. Lentulus Spinther, one of the most luxurious and ostentatious men of his age, was a partisan of Pompey. Having been pardoned by Cæsar, who had made him prisoner, he again joined the former, and was present at the battle of Pharsalia. Cneius Lentulus was put to death, in the reign of Caligula, in consequence of being detected in forming a conspiracy against that monster.

LEO I (the Great, St.) was born, according to some writers, in Rome, and, according to others, in Tuscany. The popes Celestine I and Sixtus III employed him in important ecclesiastical affairs, while he was only deacon. On the death of Sixtus III, in 440, Leo was elevated to the papal chair. The Romans were gratified with this choice; but the beginning of his pontificate was marked by an intolerant and impolitic act. He caused processes to be instituted against the Manicheans, who were concealed in Rome, and gave up those who persisted in their heresy to the secular arm. In the same manner, he proceeded against the Pelagians, Priscillianists and Eutycheans, whom he exterminated. During the session of the council of Chalcedon, in 451, to which Leo had sent four legates, Attila laid waste the Western empire, and threatened Rome. The emperor Valentinian employed Leo to intercede with that formidable warrior, in order to obtain peace. Leo addressed the barbarian with mildness, and, at the same time, with impressiveness; and Attila, induced probably, however, by other motives, left Italy, and retired beyond the Danube; but, in the year 455, the Vandal Genseric took Rome, which was exposed to pillage for 14 days. All the favor that Leo could obtain from him was, to forbid the murder of the citizens, the burning of the city, and the plunder of the three principal churches in Rome, which contained the rich offerings of Constantine. Leo is the first pope whose writings have been preserved. They consist of 96 sermons, 141 letters, and some other works. A work on the Calling of the Gentiles, and the Epistle to Demetriades, have also been ascribed to him. His style is finished and rhetorical, and his periods have a measured rhythm, which is not

unpleasant. There have been several editions of his works; one by Quesnel, at Paris (1675, 2 vols., 4to.); another at Lyons (1700, fol.); a third at Rome, by Cacciarri (3 vols., fol.); and a fourth at Venice (1737). Father Maimbourg has written his life.

LEO X (Giovanni de' Medici), second son of Lorenzo the Magnificent, born at Florence, in 1475, received the tonsure in his seventh year, and was loaded with benefices. The election of Innocent VIII to the papal chair, favored the ambitious views of his father, and, in 1488, Giovanni, then only 13 years old, was made a cardinal. Lorenzo intrusted his education to the Greek Chalcondylas and the learned Angelo Poliziano. Giovanni, naturally grave, took a greater interest in the writings of the ancient philosophers than in those of the fathers of the church; it was, therefore, made a condition of his nomination, that, before he should be invested with the purple, he should study theology three years at Pisa. In 1492, Giovanni took his seat in Rome, as a member of the holy college. His father died soon after, and was succeeded by his son Pietro, at Florence. As the young cardinal had opposed the election of Alexander VI to the papal see, he exchanged Rome for Florence, where he lived in high estimation, until the banishment of his family forced him to fly to Bologna. In 1499, he went to Venice, Germany and France, remained some time in Genoa, and then returned to Rome, where he lived in the enjoyment of a select society, and devoted to the arts, particularly music and literature. In 1505, he first took part in public affairs. Pope Julius II made him governor of Perugia, and, in 1511, placed him, with the title of *legate of Bologna*, at the head of his forces, in the holy league against France. As his suggestions, however, were little regarded by the Spanish generals of the allied armies, his influence was limited to preserving order in his camp. He was made prisoner by the French, at the battle of Ravenna, in 1512, but soon after regained his freedom, on the dispersion of the victorious army, and returned to Bologna, where he conducted the government as legate, and, after contributing to the reëstablishment of the Medici, remained at Florence until the death of Julius II recalled him to Rome. The choice very unexpectedly fell upon him, and he ascended the papal chair in 1513, in the 38th year of his age, under the name of *Leo X*. He immediately appointed two of the principal writers of his time, Bembo and Sadoleto,

his secretaries. In foreign politics, he followed the system of his predecessors, opposing the domination of foreigners in Italy as much as possible. He succeeded in driving out the French, put an end to the divisions in the church, and forced Louis XII to a formal submission. Having thus restored the public tranquillity, in the first year of his government, he gave all his attention to the promotion of literature and the arts, which had been neglected by his predecessors. The university at Rome was restored and endowed, privileges were granted it, and the most distinguished men selected as instructors. He also established a particular society for the publication of Greek authors, under the supervision of John Lascaris. That scholar, whom he had invited from Venice, and Marcus Musurus, brought over a number of young linguists, whose influence assisted in promoting a taste for classical literature. He requested the possessors of ancient manuscripts, in all countries, to make them known to him; and the publication of the five first books of the *Annals of Tacitus*, was one of the finest fruits of his efforts. Several private individuals followed the example of the pope; among whom, Chigi, a merchant, was distinguished, who established a collection of works of art, and published an edition of Pindar and Theocritus. To prevent a union of Spain, France and Austria, Leo favored a reconciliation between the kings of England and France, and even pretended to favor Louis's plans on Milan. His design of obtaining the kingdom of Naples for one branch of his family, and the duchies of Ferrara and Urbino for other branches, made the friendship of this monarch necessary, and produced a secret alliance between them; but, when a French army appeared on the frontiers, he was not satisfied with increasing his power, by a purchase of Modena from the emperor Maximilian, but also sent Bembo to Venice, to detach the republic from the French alliance; in which, however, he did not succeed. This artful, varying policy was, at that time, universal, and Leo cannot be especially blamed for it. After the death of Louis XII, Francis I having ascended the throne, and war appearing unavoidable, Leo joined the alliance of the emperor, the king of Arragon, the states of Florence, Milan and Switzerland; but, after the battle of Marignano, he withdrew, and, in 1515, he had an interview with Francis at Bologna, and formed with him a concordate, advantageous to both, but warmly censured

by the French nation. In order to increase the power and splendor of his family, after the death of his brother Giuliano, he deposed the duke of Urbino, in 1516, and gave the duchy to his nephew Lorenzo. Leo saw with regret the reconciliation of the belligerent powers, which was effected in the same year. In 1517, the duke of Urbino, who had been deprived of his estates, recovered them by force of arms. Leo, however, collected a powerful army against him, and forced him to renounce his claims on honorable terms. In the same year, a conspiracy against the pope was discovered, and cardinal Petrucci, who was suspected of being the principal, was hanged, notwithstanding the passport which had been given him. Others, whose guilt was not sufficiently proved, were tortured, deprived of their dignities, and banished. The conduct of the pope, in this instance, was neither magnanimous nor merciful. Leo's magnificence had exhausted his finances. To procure money, particularly for the completion of St. Peter's, he put all Christendom under contribution, by the sale of letters of indulgence. (q. v.) This abuse roused the zeal of Luther, and produced the reformation. Leo, at first, paid little regard to the attacks of Luther, and when he could no longer keep silence, was inclined to lenient measures. In compliance with the wishes of Maximilian, he assumed more rigor, and summoned Luther to appear in Rome, but finally agreed that he should defend himself at Augsburg, before the cardinal Caietan. Nothing being decided by that measure, he issued, in November, 1518, the well-known bull, in which he defended the papal authority of dispensing indulgences, and threatened all, who maintained contrary doctrines, with excommunication; on which Luther appealed to a general council. While open war had thus broken out in the church, Leo endeavored to unite all Christian monarchs in a crusade against the Turkish emperor Selim, who had made himself master of Egypt; but their mutual jealousies prevented the execution of his plan. Besides these public chagrins, Leo had great domestic misfortunes to suffer. Lorenzo, who had connected himself with the French court by marriage, having died, and left only a daughter, Leo therefore annexed Urbino to the States of the Church, and the cardinal Giulio de' Medici was placed in the government of Florence. Though, in Germany, the reformation (q. v.) continued to gain ground, Italy was not disturb-

ed by foreign wars. This state of things permitted Leo to indulge his taste for splendor, to promote the arts and sciences, and, at the same time, to increase the power of his family. Although in alliance with France, he did not give up his plan of preventing the aggrandizement of that power in Italy. With this view, he united with the emperor, in 1521, for the reestablishment of the family of Sforza, in Milan, and took Swiss troops into pay. The war was begun successfully; Parma and Piacenza were taken by the papal troops, and annexed to the States of the Church. The allies entered Milan without resistance, and occupied the territory of the duke of Ferrara, whom Leo had excommunicated as an ally of France. While engaged in celebrating his successes, Leo died suddenly, December 1, 1521. The age of Leo is described in Roscoe's *Life and Pontificate of Leo X*, which has been translated into German, Italian and French.

LEO XII, Annibale della Genga, born at Genoa, Aug. 2, 1760, became cardinal March 8, 1816, and succeeded Pius VII in the papal chair, Sept. 28, 1823. He early served the interests of the Roman court as a nuncio in Switzerland, at Dresden, and at other German courts, went on an embassy to Louis XVIII from pope Pius VII, and was finally created vicar-general of Rome. As pope, he made himself beloved by the people, by the remission of many taxes, by his benevolence, by personally inspecting the public institutions for the poor, the hospitals and the prisons. His firm maintenance of the rights of the court of Rome involved him in disputes with the French and Austrian governments in 1824. On Ascension-day, 1824, he announced the next year as the year of jubilee. His circular epistle to the nations of Christendom, on that occasion, contains a warm attack on Bible societies. May 17, 1824, he gave to the Jesuits and their general, Louis Fortis, the Roman college, which they had possessed until 1773, together with the church of the holy Ignatius, the *oratorium*, the museum, the library and the observatory, in order that they might devote themselves entirely to the education of the young. Leo XII also strengthened the connexion of the apostolic see with the Spanish American republics, particularly with Chile, and, in 1828, with Colombia, by recognising Bolivar's bishops. He endeavored to free the States of the Church from robbers and banditti, as well as to suppress the remains of Carbonarism. In 1825 he restored the

prisons of the inquisition. His attention was particularly directed to the remedy of numerous abuses in the departments of the Roman government, for instance, in the *camera apostolica*. Leo died in February, 1829, and was succeeded by cardinal Castiglione, who took the name of Pius VIII. Pius died December, 1830, and was succeeded by cardinal Cappellari (Gregory XVI.)

LEO VI, emperor of the East, surnamed the *Philosopher*, was the son of Basil I, whom he succeeded, in 886. He reigned weakly, and the ill success of his generals against the Bulgarians, obliged him to submit to such terms of peace as those barbarians pleased to propose. A total defeat of his fleet, by the Saracens, also took place a short time before his death, which happened in 911, after a reign of 25 years. He gave his name to several works, the principal of which are, a *Treatise on Tactics*; *Novella Constitutiones*; and *Opus Basilicon*, a collection of laws, begun by his father. He also addressed a letter to the caliph Omar, on the truth of Christianity.

LEO, Leonardo, chapel-master in the Conservatorio St. Onofrio, and private composer to the royal chapel at Naples, born in 1694 (according to Piccini, 1701), at Naples, probably studied under Scarlatti. To him, to Pergolesi, and some other composers of that period, is to be attributed the reputation which the Neapolitan school acquired all over Europe. Among his scholars, Piccini, Sacchini, Pergolesi, Traetta, are distinguished. He surpassed all his predecessors, and, as he became equally perfect in all the departments of composition, he may be esteemed one of the greatest masters of Italy. All his works were studied with veneration by the Italian musicians. Although Leo was very successful in passionate, grand and elevated compositions, he was not less so in simple, tender and comic, as his comic opera *Il ciòè* proves. Leo is, besides, the first composer who availed himself of the form of *rondos* in his comic operas. He died in 1742. His best operas are *Sofonisba* (1718, according to Burney, his first opera); *Olimpiade*; *La Clemenza di Tito* (1735); *Achille in Sciro* (1740). He composed two oratorios—*Santa Elena al Calvario* (to the words of Metastasio), and *La Morte d'Abele*. Of his church-music, his *Ave Maria*, and a *Miserere alla Capella*, are the most remarkable.

LEO, John (surnamed *Africanus*), a traveller and geographer of the sixteenth

century, was born of Moorish parents, at Grenada, in Spain, and, when that city was taken by the Spaniards, in 1492, retired to Africa. He studied at Fez, and afterwards travelled through various parts of the north of Africa. Having been captured by pirates, he was taken to Italy, and presented to pope Leo X, who persuaded him to embrace Christianity, and gave him his own name on his being baptized. At Rome, he acquired a knowledge of the Italian language, into which he translated his Description of Africa, originally written in Arabic. This is a very curious and interesting work, comprising accounts of several countries rarely visited by Europeans. Leo also composed a treatise on the lives of the Arabian philosophers. He is supposed to have died soon after 1526.

LEOBEN; a town on the Mur, in the Austrian duchy of Styria, about 1600 feet above the sea, with 2400 inhabitants, famous as the place where the preliminaries of the treaty of Campo-Formio were concluded, between Austria, Naples and the French republic, Aug. 17, 1797, after Bonaparte's successful campaign of 1796 in Italy, against the arch-duke Charles. (See *Campo-Formio, Peace of.*) Here the young French general displayed great talents as a statesman, deriving little aid from the instructions of the directory. (See *Napoleon, and Italy.*)

LEON, Ponce de Leon. (See *Ponce de Leon.*)

LEON; one of the great divisions of Spain, usually styled the *kingdom* of Leon; bounded north by Asturia, east by Old Castile, south by Estremadura, and west by Portugal and Galicia. It was united to Castile in the beginning of the eleventh century. The soil is generally fertile, and produces all the necessaries of life; and the wine is tolerably good. Population, 1,215,551; square miles, 21,000. It is divided into six provinces.

LEON (anciently *Legio Septima Gemina*); a city of Spain, capital of a province to which it gives name, at the conflux of two rivers, whose united stream runs into the Esla, 10 miles south of the town; 150 miles north-west Madrid; lon. 5° 37' W.; lat. 42° 45' N.; population, 5900. It is a bishop's see. This city is very ancient, and was formerly much more rich and populous than it now is. It was the capital of a kingdom of the same name, and the kings resided in a palace here till the year 1037. It now contains 13 parish churches, 9 convents and 4 hospitals. The cathedral is handsome, and abounds

in relics. In it are seen the tombs of 37 kings and 1 emperor.

LEONARDO DA VINCI. (See *Vinci.*)

LEONIDAS, king of Sparta, son of king Anaxandrides, ascended the throne 491 years B. C. When Xerxes, king of Persia, invaded Greece with an immense army, Athens and Sparta were the only great cities which resolved to resist him. The Spartans gave the chief command of the military force to Leonidas, who marched to Thermopylæ, in the year 480 B. C., with 300 men. Small as his army was, amounting to but 7000 men, including the allies, he stationed it so skilfully, that the Persians, on coming to the narrow pass, became aware of the difficulty of carrying it by force. Xerxes therefore attempted to bribe Leonidas, offering him the dominion of all Greece. This proposal being rejected with scorn, the despot sent a herald to order the Greeks to surrender their arms: "Let him come and take them," was the reply of the Spartan king. Thrice did the Persians advance against the pass, in great force; thrice were they repelled, with great loss. Meanwhile, a traitorous Greek, named Ephialtes, led a select troop of 10,000 Persians, by a secret path, over the mountain, who, after compelling the few opposing Phocians to take to flight, appeared in the rear of Leonidas. He now saw that all was lost, but resolved to show, by a memorable example, what the Greeks could perform in the cause of their country. He is said, also, to have been influenced by an oracle, which declared that Sparta could be saved only by the death of one of its kings. To avoid useless bloodshed, Leonidas dismissed the greater part of his troops, and retained but 300 Spartans, 700 Thespians, and 400 Thebans; the last, in some measure, as pledges of the fidelity of their countrymen, and the Thespians, because they could not be induced to leave their Spartan allies. As soon as Xerxes had learned the successful passage of the troops led by Ephialtes, he threw himself, with his whole force, into the entrance of the pass. But Leonidas, before day-break, penetrated into the Persian camp. After a long contest, the hero fell, surrounded by fallen enemies. His men defended his body, till they sunk beneath countless assailants. This defence of Thermopylæ is one of the most remarkable exploits of antiquity. The Greeks erected a splendid monument to the fallen, and celebrated, annually, warlike games over their sepulchres.

LEONINE VERSE; a kind of Latin verse, in vogue in the middle ages, consisting of

hexameters and pentameters, of which the final and middle syllables rhyme; so called from Leonius, a poet of the twelfth century, who made use of it, or, according to some, from pope Leo I (A. D. 680). Poems of considerable length were written in this barbarous taste. The following distich may serve as an example:

*Dæmon languēbat, monachus tunc esse volebat;
Ast ubi convaluit, mansit ut ante fuit.*

Leo versified a great part of the Old Testament in this manner. (See *Rhyme*.)

LEONTIUM (*Leontia*); a courtesan, the scholar and mistress of Epicurus. According to some, she was his lawful wife; according to others, the mistress of Metrodorus. She is said to have possessed distinguished talents, and to have composed an essay, replete with acuteness and learning, in a beautiful attic style, in defence of the doctrines of Epicurus against Theophrastus.

LEONTODON TARAXACUM, or **DANDELION**. This plant is now so common in many of the settled parts of the U. States, and has become so intimately associated with our other spring flowers, that few, except professed botanists, are aware that it is not a native. It has, however, been introduced from Europe, where it is a very frequent and familiar plant. The leaves are all radical and runcinate, or jagged on the margin, and from this circumstance has been derived its French name—*dent de lion*, or lion's tooth, of which the English appellation is a corruption. The stems are hollow, and bear single, large, yellow flowers, consisting of a congeries of florets, each of which is succeeded by a naked seed, bearing, on a long pedicle, a tuft of radiated down. By means of this tuft, the seed, when detached, is kept suspended in the air, and transported, by the winds, to a distance. In this respect, however, it does not differ from most of the *compositæ*. The whole plant is full of a milky and bitter juice; notwithstanding which, it is in common use as an early vegetable. The roots, when roasted, are said to form a good substitute for coffee, and are used for that purpose in some parts of Germany.

LEOPARD (*felis leopardus*). This beautiful but savage animal is spread as widely over the countries of the old continent as the lion, and, throughout this extent, he varies but little, and that merely in magnitude, in the size and form of his markings, and the intensity of their coloring; but he is every where the same as to form and structure, as well as in character and disposition. His ground color is a yellowish

fawn, which becomes paler on the sides, and is lost in the pure white of the under part of the body. The back, head, neck, limbs, and under surface of the body, are marked with black spots, of different sizes, and placed in an irregular manner, whilst the sides are covered by numerous distinct roses, formed by the congregation of smaller spots, placed in a circular form. In general appearance, this animal is fierce, and is, in fact, equally savage and dastardly with the rest of the cat kind. His usual prey is antelopes, monkeys, and the smaller quadrupeds. He always avoids man, except when closely pursued, when he offers an obstinate resistance. Occasionally, however, the lone traveller has fallen a victim to these ferocious and sanguinary animals. When they attack a flock of sheep, the slaughter they commit is almost incredible. Kolbe states that two leopards, a male and female, and three young ones, entered a sheepfold at the cape of Good Hope; the old animals killed near 100 sheep; when they were satiated, they fed their young, and, each seizing a whole carcass, attempted to move off, but they were waylaid and killed. The Negroes take them in pitfalls, slightly covered over with hurdles, on which a piece of meat is placed as a bait. From the extraordinary flexibility of the limbs of this animal, he is enabled to ascend trees, in which he usually takes refuge when pursued. When taken young, he can be tamed to a certain degree. According to travellers in Africa, the flesh of the leopard is excellent, resembling veal. The skins are valuable, selling, in Europe, at from \$20 to \$50.—*Hunting-leopard* (*F. jubata*), or *cheetah*, as it is termed in India, is about the size of a greyhound, with a narrow chest and long legs, of a thin make in the body and limbs, apparently calculated rather for speed than strength. In fact, this animal forms a sort of connecting link between the feline and canine groups. He is of a pale yellow color on the upper part, white underneath, and covered all over with very small irregular spots. He has a slight mane, extending along the back of the neck and upper part of the back. He is capable of being perfectly tamed, and is employed, in the East, for the chase of antelopes. He is carried to the field in a cart, in which he is kept chained and hood-winked, till brought within view of a herd, when he is released, and the hoods removed. The animal steals gradually towards his prey, till he has attained a proper distance, when, with five or six

surprising bounds, he springs upon it. If, however, he is unsuccessful in his attack, he does not attempt to renew it, but returns, with a mortified air, to his keeper.

LEOPOLD I, German emperor, second son of the emperor Ferdinand III and Mary Anne of Spain, born 1640, was chosen, in 1655, king of Hungary; in 1658, king of Bohemia; and, in 1659, emperor of Germany. On ascending the throne, he was obliged to promise to afford Spain no assistance against France. The Turks had then defeated the imperial army, and desolated Moravia, because the emperor had aided the prince of Transylvania, Ragotsky, who had ceased to pay an annual tribute to the Ottoman Porte. Montecuculi, Leopold's general, supported by 6000 select French troops, under Coligny and Feuillade, defeated the Turks, August 1, at St. Gothard; but, instead of improving this victory, the cabinet of Vienna concluded a truce for 20 years, and Ragotsky remained tributary to the Porte. Hungary was to be totally subjugated; but the nobles of this country attempted to throw off the Austrian supremacy, and to choose a king from their own nation. This undertaking cost Zrini, Frangipani, Nadasti, and other Hungarians, their lives. Tekeli (see *Tekeli*) now placed himself at the head of the malcontents, and was chosen king of Hungary by the Turks, for an annual tribute of 40,000 zechins. Tekeli called the Turks into the German empire; with an army of 200,000 men, they captured the island of Schütt, and laid siege to Vienna, in 1683. Just as the city was on the point of surrendering, John Sobiesky hastened to its relief. The Turks were attacked in their intrenchments, and suffered a total defeat. A panic terror seized the grand vizier, Kara Mustapha: he fled, and left his camp to the victor. This defeat was followed by others, and the imperialists recovered all the lost cities. Leopold caused the Hungarian insurgents, whom he looked upon as the cause of all the dangers which menaced Germany, to be severely punished. Hungary, which had been an elective monarchy, was declared, at the diet of Presburg, in 1687, hereditary in the Austrian male line, and Joseph, the eldest son of the emperor, was crowned as king of Hungary, without any previous election. Transylvania submitted, without reserve, to the Austrian house. Leopold waged three wars with France, which he declared wars of the empire. The first, in 1672, in connexion with Spain and Bran-

denburg, to assist the Dutch, attacked by the French and English, was unsuccessful on the part of the emperor and empire, and was terminated by the peace of Nimueguen, Feb. 5, 1679. The second war had its origin in the league formed at Augsburg, in 1686, with Holland and Spain, against France. In this war, the Palatinate was terribly devastated by the French. The German arms were generally successful, and, by the peace of Ryswick, Oct. 30, 1697, France restored all that it had torn from Germany since 1680, besides relinquishing to Germany Brisach, Friburg, Kehl, Philippsburg, and several smaller fortresses. The duke of Lorraine, a near relation of the king, recovered his territories, from which his family had been expelled, in 1670, by Louis XIV. The third war was undertaken by Leopold, in 1702, in order to procure the succession to the throne of Spain for his second son, Charles; but he died in the course of this war, May 5, 1705. His eldest son, Joseph, already crowned Roman king, in 1690, prosecuted the war with great vigor. (Respecting the great commotions in Hungary, in the beginning of the eighteenth century, see *Ragotsky*.) As the youngest son of Ferdinand III, Leopold had been educated for the church, and his reign was marked by attachment to the clergy, irresolution, and indulgence towards his ministers, to whom he intrusted the whole management of the government. He was passionately fond of music, and was himself a composer. After he had uttered his last prayer, on his death-bed, he caused his musicians to enter, and departed to the sound of instruments. He was thrice married. Two sons survived him—Joseph I, born in 1678, his successor, and Charles, archduke of Austria, born 1685, who became emperor in 1711.

LEOPOLD II, emperor of Germany, born 1747, on the death of his father, the emperor Francis I (1765), became grand-duke of Tuscany, and, during a reign of 25 years, almost regenerated that country. He encouraged commerce, agriculture and manufactures, improved the roads, established penitentiaries, abolished the inquisition, and proclaimed a new criminal code. His financial administration was admirable, and he was personally simple in his manner of living. He preceded his brother Joseph (q. v.), emperor of Germany, in measures of ecclesiastical reform, but conducted them with more prudence and caution, yet to the great displeasure of the Roman court.

When the death of Joseph II called him to the imperial throne, he found the hereditary states of Austria in a critical situation. In pursuance of the terms of the convention of Reichenbach with Prussia (July 27, 1790), he concluded an armistice with Turkey, which was followed by the peace of Sistova, in 1791, surrendering all the Austrian conquests to the Porte. After reducing the revolted Netherlands, by force of arms, he allowed them the enjoyment of their former privileges, and restored many of the ecclesiastical establishments, which had been abolished by Joseph. Quiet was restored in Hungary, the police and the administration of justice were reformed, and public education encouraged. In 1791, he had the celebrated interview with the king of Prussia, at Piltz, on which occasion the two monarchs declared the situation of the king of France to be a subject of general interest to all the sovereigns of Europe. After having restored many institutions and usages, which Joseph's ardent spirit had led him to abolish, Leopold died, March 1, 1792. Leopold was one of the best disposed monarchs who ever sat on a throne, and it is not to be denied that he effected much good; but it was his lot to reign at the time of a great struggle between old and new principles, which is always a difficult, and generally a deplorable situation for a prince, who is plunged into a whirlpool, where all power of self-direction is lost. This should be kept in mind, in judging of the convention of Reichenbach.

LEOPOLD I, prince of Dessau, a Prussian general, born in 1676, early showed a strong inclination for the military service, and, in his 12th year, received from the emperor Leopold the command of a regiment. After having travelled two years, he made his first campaign on the Rhine, in 1696. In the war of the Spanish succession, he proved himself a brave and skilful general. He had an honorable share in the victory at Blenheim, and fought with distinction in Italy. After having commanded the Prussians in the Netherlands, he was made general-field-marshal in 1712, and Frederic William I, the new king, was so much attached to him, that he kept him constantly near his person. In a campaign against the Swedes, he was again victorious. Frederic the Great placed no less confidence in him, and, in 1742, he received the chief command in Silesia. In 1745, he gained the bloody battle of Kesseldorf, in consequence of which Dresden was taken by

the Prussians, and peace was concluded. When not in the field, he paid great attention to agriculture. He died of apoplexy, in 1747. At the time of his death, he was imperial and Prussian general-field-marshal, and governor of Magdeburg. His manners were rough, often coarse; but he was brave, sincere and honest, and very much beloved by the soldiers. A popular march, still often played in Germany, particularly in the North, is called the *Dessauer Marsch*, because it was prince Leopold's favorite.*

LEOPOLD, George Christian Frederic, prince of Saxe-Coburg-Saalfeld, husband of the late princess Charlotte, second brother of the present duke of Coburg, was born Dec. 16, 1790. The duchess of Kent, mother of the princess Victoria, the heiress-presumptive to the crown of Great Britain, is his sister. On the marriage of his sister Anna with the Russian prince Constantine, he received the title of general in the Russian service. In 1808, while the duke of Coburg was absent in Russia, and at Erfurt with Alexander, prince Leopold administered the government with prudence and success, and ever after continued the confidential counsellor of his brother. Napoleon compelled him, in 1810, to give up his command in the Russian army, and he devoted himself to the arts and sciences, and the affairs of his house. In 1812, he visited Vienna, Italy and Switzerland. Meantime, the issue of the Russian campaign had changed the face of things in Northern Germany, and the princes of Coburg were eager to aid in the common efforts against the French. Leopold joined the emperor Alexander in Poland, and entered France, in 1814, in the Russian army. He then visited the British capital, with the allied sovereigns, and here became acquainted with the princess Charlotte. On his return to the continent, he repaired to the congress of Vienna, and, in 1816, received the consent of the prince of Wales to the union with his daughter. She had been destined for the prince of Orange, but the decided inclination which she manifested for prince Leopold, induced the prince regent to abandon that design. The melancholy

* It is related of prince Leopold, that he used to pray, before battle, to the following effect: "O God! assist our side; at least, avoid assisting the enemy, and leave the result to me." This, if not true, shows, at least, the opinion entertained of his simplicity and straight-forwardness, and must be allowed to agree entirely with his character.

death of the princess, in November, 1817, left the prince a widower; and he resided, for some time, principally on the continent. His pension of \$50,000, from the British treasury (of which he has lately refused to relinquish a part), has contributed, in some measure, to render him less popular in England than formerly. In 1830, he was chosen king of Greece; but, after having shown a readiness to accept this dignity, he finally declined it, on the ground that the Greeks were not satisfied with the arrangements which had been made by the allied powers. In 1831, he was chosen king of Belgium. (See *Netherlands*.)

LEPANTO, or AINABACHTI; formerly a sangiac, in Rumili (Turkey), with 80,000 inhabitants. The capital of the same name, a seaport, was anciently called *Naupactus*; lon. 22° 20' E.; lat. 38° 27' N.; population, 2000, according to Hassel. The town is situated in a bay, formerly called the *gulf of Corinth*, now the *gulf of Lepanto*, or *gulf of Patrass*, which is 70 miles long. It is fortified and defended with a castle, built on an eminence. Being ceded by the emperor to the Venetians, it was fortified by them, and, in the year 1475, stood a siege of four months against the Turks, who lost 30,000 men. Near this town, don John of Austria obtained a celebrated victory over the Turkish fleet, Oct. 7, 1571. Cervantes, the celebrated author of *Don Quixote*, fought as a soldier in this battle, and had his left hand shot off by an arquebuse. The Turkish fleet consisted of 210 galleys, 23 transports, and 6 galleasses, with heavy artillery. The Spanish fleet was increased by an auxiliary flotilla, sent by the Venetians, and by some papal galleys. Both the fleets sought to come to close quarters. The battle was fought with bows, javelins, grapnels, and with cannon, muskets, pikes and the sword. John of Austria, the commander-in-chief, and Veniero, the commander of the Venetian squadron, attacked the Turkish admiral Ali, took his vessel, and made him prisoner. His head was immediately struck off, and placed above the top of his own flag. The Christians were victorious. The Turks lost 150 vessels; more than 15,000 men were killed, and 5000 Christian slaves liberated. The Christians also lost 5000 men slain and wounded. Nothing prevented their sailing to Constantinople, except a dispute in regard to the division of the booty. This battle put a stop at once to the progress of the Turkish power, which had attained a fearful magnitude in the Mediterranean. (See *Barbarossa*.) The Christians had almost lost

the hope of effectually resisting it; and, for this victory, don John of Austria (q. v.) deserves the gratitude of the whole European world.

LEPER. (See *Leprosy*.)

LEPIDUS, M. ÆMILIUS, the Roman triumvir, having served the interests of Cæsar (q. v.), was made by him his colleague in the consulship. After the assassination of Cæsar, although the republican party endeavored to win him to their ranks, he joined Antony (q. v.), and afterwards made the infamous partition of the empire with him and Octavius Cæsar. (See *Augustus*.) After the victory of Philippi (q. v.), his two colleagues made a new division, leaving him, however, the command of Africa. Augustus having called him to render assistance against Sextus, Lepidus attempted to render himself master of Sicily, but was obliged to submit to the former, and to take his seat again in the senate. Montesquieu says that he was the worst citizen in the republic. Without firmness or talents, he seems to have been elevated by fortune to render his fall the more striking.

LEPROSY (Greek *λεπρα*); a name given to several different diseases. The elephantiasis (q. v.) is sometimes called *leprosy of the Arabs*. The *leprosy of the Jews* is distinguished by white, cutaneous spots, composed of smaller spots, which appear sometimes in one place and sometimes in another, and are covered with a rough scaly matter. It appears to have been the *leuce* of the Greek writers. The *Greek leprosy* is characterized by hard, insensible tubercles, which appear upon the skin, and are accompanied by a progressive insensibility, and the loss of the voice. It is endemic in Egypt, Java, and some parts of Norway and Sweden. The use of unhealthy articles of food seems to be one of its causes. It is hereditary and contagious. It was introduced into Western Europe in the time of the crusades, but has gradually disappeared. The tubercles which characterize leprosy appear in different parts of the skin: they are hard, rough and numerous, and cause the loss of the hair at the places where they appear. They finally terminate in ulcers, which penetrate even to the bone, producing a caries. They also cause the separation of parts of the body, the toes and fingers, for example, dropping off. These symptoms are accompanied with a languor in the motions, a dullness of the senses, a change of the voice, offensive breath, and lethargy. There are three sorts of leprosy—the squamous, or scaly,

the crustaceous, in which the skin is covered with crusts, and the tuberculous. The remedy recommended for this disgusting disease is light food, such as vegetables, soups, milk: sulphur baths, sudorific drinks, mercury, are sometimes prescribed. But all remedies are too frequently unavailing. In the middle ages, leprosy, under all the forms of disease to which this term has been applied, seems to have been very common and general. It should, however, be observed, that almost all cutaneous disorders were considered as of a leprous nature, and treated as such. From the sixth to the fifteenth century, these loathsome disorders attracted the attention of lawgivers and of the benevolent, and we find numerous ordinances relating to lepers, affecting their civil rights, and great numbers of lazarettos in all the countries of Europe. In the historians of those times, therefore, we are to consider the word *leprosy* as used indiscriminately of all cutaneous diseases; and we may well be astonished and shocked to find that all such patients were treated somewhat after the manner prescribed in Leviticus for the Jewish leprosy. They were, in fact, treated as civilly dead: their funeral obsequies were performed, and masses said for the benefit of their souls. Their marriage ties were dissolved, but a leper might enter into a new connexion with a person who was also afflicted with the disease. They were allowed to enter the cities at certain seasons, but were required to give notice of their approach by sounding a rattle. The consequences of such a treatment may be easily imagined. The improved condition of the lower classes, in food, clothing and manner of living in general, and the advancement of medical science, have contributed to eradicate this loathsome and disgusting malady.

LERMA, Francis de Roxas de Sandoval, duke de, first minister of Philip III of Spain, was marquis of Denia, when he was appointed equerry to the Infant don Philip, over whom he acquired such influence, that, when the prince ascended the throne, in 1598, he made him his favorite and prime minister. He concluded peace with England and Holland, and endeavored to relieve the embarrassed state of the finances, by encouraging agriculture; but his measures were ill-contrived. After the death of his wife, he took the ecclesiastical habit, and obtained a cardinal's hat, which he conceived would protect him in the possession of his power. But he was deceived; for his own son, the duke D'Uze-

da, contrived to supplant him in the king's favor, and succeeded to his post on his being dismissed, in 1618. He was accused, without any probability, of having employed his secretary, Roderic Calderon, to poison the queen. For this imaginary crime, Calderon was executed in the next reign. The duke of Lerma died in retirement, in 1625.

LESAGE, Alain René; a celebrated French novelist and dramatic writer. He was born May 8, 1668, at Sarzeau, a small town in Brittany, and was the son of a lawyer, who held an office in the royal court of Rhuys. His father dying in 1682, he was placed under the guardianship of an uncle, who dissipated the fortune of his ward. He studied at the college of the Jesuits, at Vannes, after which he appears to have been employed in his native province for five or six years. In 1692, he went to Paris to study philosophy, and also to solicit some employment. His talents and manners procured him admission into the best society, where his wit and taste for elegant literature rendered his company very acceptable. His first literary undertaking was a translation from the Greek of the Letters of Aristenæus (1695). Established as a resident in the capital, he was admitted an advocate of parliament; and the abbé De Lyonne gave him a pension of 600 livres. He studied the Spanish language, and produced a multitude of translations or imitations of Castilian dramas and romances. Two of his comedies were published in 1700, and a third was acted in 1702; but it was not till 1707, when his *Crispin, Rival de son Maître*, appeared, that he established his reputation as a theatrical writer. His success as a novelist has most contributed to make him known to foreigners. *Le Diable Boiteux*, the title of which has been oddly translated "The Devil upon two Sticks," became extremely popular; and *Gil Blas de Santillane* (1715) has furnished a model for numberless imitations in various countries and languages. Lesage projected a translation of the Orlando of Ariosto, and published, in 1717—21, *Roland l'Amoureux*, from Boiardo, as an introduction to the former, which was never executed. In 1732, he published *Les Aventures de Guzman d'Alfarache* (2 volumes, 12mo.); and, the following year, *Les Aventures de Robert, dit le Chevalier de Beauchesne* (2 volumes, 12mo.), containing the real history of a freebooter, from papers furnished by his widow. In 1734, appeared *L'Histoire d'Estevanille Gonzales* (2 volumes, 12mo.); and, in 1735, an amus-

ing dialogue, entitled *Une Journée des Parques* (12mo.). The last of his novels was *Le Bachelier de Salamanque*, which La Harpe considers as inferior to all the preceding. He did not cease writing, but, in 1740, produced a collection of satirical letters, under the title of *La Valise trouvée*, and, in 1743, a volume of anecdotes. In the year last mentioned, he retired to Boulogne, where he died Nov. 17, 1747. Lesage produced a great number of comic pieces for the theatre, seven of which he published in his *Théâtre Française* (1739, 2 volumes, 12mo.), including *Crispin Rival de son Maître*, and *Turcaret*, intended as a satire on the farmers-general. Notwithstanding his talents, and the success of his numerous compositions, the author of *Gil Blas* was by no means rich, owing to a carelessness and liberality of disposition, which prevented him from soliciting the great for employments, or from steadily accumulating the products of his literary industry.

LESAGE. (See *Las Cases*.)

LESBOS (now *Metelin*, from the former capital, Mitylene, once the residence of Aristotle, now a Turkish fortress); a Greek island, 137 miles in circumference, containing 260 square miles, 40,000 inhabitants, for the most part Turks, in the northern corner of the *Ægean sea* (the Archipelago), on the Asiatic coast. According to tradition, Lesbos, son of Lapithas, and grandson of *Æolus*, by the advice of an oracle, led a colony to this island, espoused Methymna, daughter of Macareus, and received with her the dominion of half of the island, to which he gave the name of *Lesbos*, it having been previously called *Isa*, and *Pelagria*, from the Pelasgians. The island contained forests of beech, cypress and fir trees. It yielded marble of a common quality, and the plains abounded in grain. Warm springs were also found; agates and precious stones. The most profitable production was wine, which was preferred, in many countries, to all the other Greek wines. To the present day, the oil and figs of Lesbos are accounted the best in the Archipelago. The island formerly contained nine cities, for the most part in a flourishing condition; among them, Mitylene, Pyrrha, Methymna, Arisba, Eressus and Antissa: at present, 120 villages are enumerated. Lesbos was originally inhabited by *Æolians*, who formed a powerful democracy from an insignificant monarchy. They afterwards made great conquests on the continent and former territory of Troy, and even resisted the Athenians them-

selves. Lesbos was next disturbed by the Samians, and, afterwards, by the Persians, to whom it was finally obliged to submit. After the battle of Mycale, it shook off the Persian yoke, and became the ally of Athens. During the Peloponnesian war, it separated, more than once, from Athens, but was always reduced to obedience. A distinguished citizen of Mitylene, exasperated that several rich inhabitants had refused his sons their daughters in marriage, publicly accused the city of an intention to conclude a league with the Lacedæmonians, by which false accusation he induced the Athenians to send a fleet against Lesbos. The nearest cities, Methymna excepted, armed in defence of their capital, but were overpowered, the walls of Mitylene demolished, and a thousand of the richest inhabitants put to death. The territory of Methymna alone was spared. The island itself was divided into 3000 parts, of which 300 were devoted to the service of the gods, and the rest divided among the Athenians, by whom they were rented to the ancient proprietors. The cities of Lesbos, nevertheless, soon rebelled again. The Lesbians were, moreover, notorious for their dissolute manners, and the whole island was regarded as the abode of pleasure and licentiousness. At the same time, they had the reputation of the highest refinement, and of the most distinguished intellectual cultivation. Poetry and music made great progress there. The Lesbian school of music was celebrated, and is said to have had the following origin: When Orpheus was torn to pieces by the Bacchantes, his head and lyre were thrown into the river Hebrus, and both were cast, by the waves, on the shore of Methymna. Meanwhile, harmonious sounds were emitted by the mouth of Orpheus, accompanied by the lyre, which was moved by the breath of the wind. The Methymnians therefore buried the head, and suspended the lyre in the temple of Apollo. In return, the talent of music was conferred on them by this deity. In reality, Lesbos produced musicians superior to all the other musicians of Greece. Among these, the most distinguished were Arion of Methymna, and Terpander of Antissa. Alcæus and Sappho were esteemed the first in lyric poetry. Pittacus (one of the seven wise men), the philosophers Theophrastus and Theophanes (the bosom friend of the great Pompey), and the historians Hellanicus, Myrtilus, &c., were also natives of this island. It was often chosen as a place of residence by distin-

guished foreigners. Epicurus and Aristotle taught there.

LESLIE, John, a distinguished Scotch chemist, mathematician and natural philosopher, professor of natural philosophy in the university of Edinburgh, is the author of numerous scientific works of great value. Among them are his Inquiry into the Nature and Propagation of Heat (8vo., 1804); Elements of Geometry, Geometrical Analysis, and Plane Trigonometry (1811); Account of Experiments and Instruments depending on the Relation of Air to Heat and Moisture; Philosophy of Arithmetic (1817); and various papers in scientific journals. He has likewise invented several curious and valuable philosophical instruments. His differential thermometer is an important acquisition to physics. (See *Thermometer*.) His election to the professorship, for which he was a candidate, did not succeed without a violent altercation between the members of the university, and some of the divines of the church of Scotland, who opposed Mr. Leslie on account, as they alleged, of his being a sceptic in religious matters. Mr. Leslie was one of the contributors to the Edinburgh Review, and the Supplement to the *Encyclopædia Britannica*. The author of Peter's Letters says of Mr. Leslie, "He is a very fat, heavy figure of a man, without much more appearance of strength than of activity; and yet by no means a slothful-looking person. His face is one which, at first sight, you would pronounce to be merely a coarse one, but in which, once informed to whom it belongs, you are at no loss to discover a thousand marks of vigorous intellect, and fancy too. Of this last quality, indeed, his eyes are, at times, full to overflowing. In the midst of the sombre gravity of his usual look, there are always little flashes of enthusiasm breaking through the cloud; and, in this respect, he forms a striking contrast to the calm, tranquil uniformity of Mr. Playfair's physiognomy and deportment."

LESLIE, Charles Robert, was born in London, October 19, 1794, of American parents, both of whom were natives of Maryland, to which province his great-grandfather, Robert Leslie, had emigrated from Scotland soon after the rebellion, in 1745. The family returned to Philadelphia, when Charles Leslie was about five years old, and long before that period he had given extraordinary indications of a talent for painting. His first attempts were on the slate, and were generally representations of horses and soldiers, rude of course, but strikingly spirited and

characteristic; and, at six years of age, he could sketch, from recollection, and with great accuracy, the likeness of any person whom he was in the habit of seeing. At the age of 13, he was taken from school, and placed as an apprentice with Mr. S. F. Bradford of Philadelphia, bookseller; but, though he scrupulously fulfilled the duties of his situation, his heart was with his pencil, and almost every leisure moment was indefatigably devoted to his favorite pursuit. It was his practice, after seeing a play, to make little water-color drawings of the principal performers in their respective characters. He was much struck with Cooke's personation of Richard, and, leaving the house as soon as the tragedy was over, he commenced a small sketch of the gifted and eccentric actor in this his most celebrated part; and, when the family came home (having staid to see the farce), they found the drawing nearly completed. All these drawings of the performers were entirely from memory. The fortunate little sketch of Cooke in Richard was much admired and talked of. The juvenile artist (who was then but 16) became immediately an object of notice, and he was consequently enabled to accomplish his ardent desire of adopting a profession which he preferred to all others, and of seeking in Europe those opportunities of improvement which were not to be found in America. Mr. Bradford generously gave up his indentures, and Mr. Sully, with his usual kindness, directed his first essay in oil—a small head from one of the old masters. Shortly after his arrival in London, he sent to Philadelphia his first original oil-picture, William of Deloraine,* from the Lay of the Last Minstrel. Since that time, he has lived constantly in Europe, his engagements never having allowed him to pay even a transient visit to the country of which he has always considered himself a citizen, notwithstanding the circumstance of his birth having taken place in England. He has been some years an academician, and it is unnecessary to dilate on the success which has attended his professional career. Among the most distinguished productions of his pencil, are May Day in the reign of Elizabeth; Slender courting Anne Page; lady Jane Grey prevailed on to accept the crown; Sancho relating his adventures to the duchess, and Falstaff dining at Page's house. The picture which, according to custom, he presented to the royal acad-

* Now in the academy of Philadelphia.

emy on being elected a member, is Catharine of Arragon, after her divorce from Henry VIII. His portrait of sir Walter Scott, painted for Mr. Ticknor of Boston, is considered an excellent likeness.

LESPINASSE. (See *Espinasse*.)

LESSEPS, John Baptiste Barthelemi, baron of, the fellow traveller of the unfortunate Lapérouse (q. v.), born at Cette, in 1765, devoted himself to the diplomatic career. For five years, he was vice-consul in Petersburg, where his father had previously performed the functions of French consul-general. In consequence of the recommendation of the minister of war, the duke of Castries, the king of France appointed him interpreter to the expedition of Lapérouse. On his arrival on the coast of Kamtschatka, he received orders, September 29, 1787, to leave the frigate *L'Astrolabe* (Lapérouse's vessel), in order to convey to France, by land, the accounts and journals of the thus far successful voyage of the navigator. Under great difficulties, Lesseps travelled, in the roughest season of the year, from Kamtschatka to Petersburg, where he gave his papers to the French ambassador, count Ségur, and hastened to Paris, to render to the king more minute verbal information. Appearing, in compliance with the desire of Louis XVI, in the Kamtschatkan dress which he had brought home, Lesseps was for some time the object of curiosity to the whole court. The monarch subsequently appointed him consul in Cronstadt, after which he discharged the same office in Petersburg, where he remained till 1812, when Napoleon made him intendant at Moscow. After the change of government in 1814, he was sent by Louis XVIII, as *chargé d'affaires*, to Lisbon. Lesseps has published a journal of his travels and observations in Kamtschatka and Siberia (2 vols., 1790).

LESSEPS, John Baptiste de, born 1774, subprefect of Lambez, remarkable for his adventures, in 1790, emigrated, and served as a common soldier under Condé. In consequence of the amnesty afforded by Bonaparte to emigrants, he returned, and followed a relation to Egypt, became French consul in Alexandria, and acquired many friends by his humanity and benevolence, both among the natives and his countrymen. Being taken prisoner soon after by the Arnauts, he was dragged to the market to be murdered, when a native, to whom he had once rendered a service, took him from his assailants, on pretence of a wish to sacrifice

him more slowly and cruelly. Lesseps thus escaped the sword, returned to France, and, after the union of Tuscany with the empire, was appointed sub-prefect in Sienna, where he remained till the restoration, when he was removed in the same capacity to Lambez.

LESSING, Gotthold Ephraim, one of the most distinguished German authors, who contributed more than any other individual to the regeneration of German literature, and whose language is a model of German prose, was remarkable for the versatility of his genius. Lessing was born January 22, 1729, at Kamenz, a town in Upper Lusatia. His father, a strict Lutheran clergyman, gave him his first religious instruction. In 1741, Lessing was sent to the school at Meissen, where he studied Greek, Latin and mathematics with great success. In 1746, he entered the university of Leipsic, but could never be induced to devote himself to a strict routine of prescribed study. Here he became acquainted with several young men, afterwards distinguished in literature; and, in connexion with a friend named Weisse, he translated the Hannibal of Marivaux, and prepared for the stage a dramatic performance begun while he was at school. This was brought forward by a stage directress named Neuber, with whom he was acquainted. Actors were at that time considered as vagabonds, and his father, much distressed at his son's mode of life, ordered him to return home. Here he wrote his Anacreontics, though wine and love were little akin to the sobriety of his situation. In 1750, Lessing went to Berlin, where he contributed to several periodicals, and attracted some attention by his correspondence with Voltaire, occasioned by Richier, Voltaire's amanuensis, having shown him a copy of Voltaire's *Vie de Charles XII*, before it was published. In compliance with the anxious wishes of his parents, he then went to Wittenberg, and applied himself, with his younger brother, very diligently to his studies. At this time, he translated Huarte's (q. v.) *Trial of Wits*, and wrote a critique on Klopstock's *Messiah*. In 1753, he returned to Berlin, and wrote the learned articles in Voss's *Gazette*. In 1755, he wrote his tragedy of *Sarah Sampson*, at Potsdam. In the same year, he set out on a tour, with Mr. Winkler, a merchant; but, in consequence of the breaking out of the seven years' war, they only proceeded to Holland. In 1757, in connexion with Nicolai and Mendelssohn, he

edited the Library of Belles-Lettres. He also began his *Virginia*, which was subsequently completed under the name of Emilia Galeotti, and is much the most elaborately finished of his works. In 1760, Lessing became a member of the royal academy of sciences at Berlin, and soon after became secretary to general Tauenzien, in Breslau, wrote *Minna von Barnhelm*, a military comedy, and his *Laocoon*, or *On the Limits of Poetry and Painting*, and began deeper researches into philosophical and theological subjects, though, at the same time, he followed his inclination for games of hazard more than previously. In 1765, he once more returned to Berlin, to devote himself solely to the sciences; but, unaccustomed to so sedentary a life, he is said to have formed the plan of putting himself at the head of a company of strolling players. We shall not therefore be surprised to find him, in 1767, in Hamburg, whither the proprietors of the theatre had invited him on very favorable terms. While there, he wrote his *Dramaturgie*; but a misunderstanding with his employers, and the indocility of the actors, rendered his residence at Hamburg disagreeable. At the same time began his dispute, or it may more properly be called quarrel, with Klotz. (q. v.) Dissatisfied with his situation, he now determined to go to Italy, when an advantageous offer of the place of librarian at Wolfenbüttel changed his intention. The little court of Brunswick was then almost the only one in Germany which fostered German literature: the others confined their attention to the French. In 1769, he left Hamburg. In the library of Wolfenbüttel, he discovered the MSS. of the *exsubstantiator* Berengarius of Tours, in which he refutes the work of the *transubstantiator* Lanfrancus. He also published some theological treatises, under the title of *Wolfenbüttel Fragments* of an unknown Author, which involved him in a theological war. In 1775, he went to Vienna, having received an invitation to that city, and accompanied prince Leopold of Brunswick to Italy, which he had long desired to see. He left Germany in April, but returned the same year; and the theological disputes in which he was involved, now became so acrimonious, that it was proposed, at Wolfenbüttel, to subject his writings to a strict censorship. His Nathan the Wise, from its supposed irreligious tendency, added to the fierceness of the controversy. As a poem, it is, in our opinion, much the finest that he has written. The persecutions which he

encountered destroyed his peace, and he died February 15, 1781. His complete works were published at Berlin (1771, seq.); another edition (Berlin, 1796, seq. 30 vols.); to which must be added his *Correspondence*, in 2 vols. (Berlin, 1798); a new edition appeared at Berlin (1824), in 34 vols.; a pocket edition has been published at the same place since 1825. Lessing's *Thoughts and Opinions*, collected and explained from his Writings, by F. Schlegel, appeared at Leipsic (1804, 3 vols.). His brother, K. G. Lessing, published an account of his life (Berlin, 1793, 2 vols.).

LESTOCQ, John Hermann; a favorite of the Russian empress Elizabeth, twice elevated by fortune to be twice precipitated from his high honors. Lestocq was born in Hanover, in 1692, of French parents, who had fled from the religious persecutions of Louis XIV. He studied surgery under his father, went to Russia, then a good field for men of talents, and entered the service of Peter the Great, as a surgeon, and enjoyed his entire confidence. A sudden change in the emperor's dispositions towards him took place, and Lestocq, without knowing the cause, was banished to Kasan. Catharine I recalled him after the death of Peter, and gave him the place of surgeon at the court of her daughter Elizabeth. Entirely devoted to the interests of his mistress, he offered her his assistance in gaining possession of the crown, after the death of Peter II; but his daring plans were then rejected. Eleven years later (1740), when the youth of Ivan, and the regency of his mother Anne, again presented an opportunity, his advice was adopted. The active and politic Lestocq guided the daring enterprise, never, even in moments of the greatest danger, losing his presence of mind, and, November 24, 1741, Elizabeth ascended the throne. The new empress made him her privy counsellor, and chief physician, and director-general of medical institutions. The king of Poland created him count, and sent him his miniature to be worn in his button-hole, like an order. In compliance with the wishes of the empress, Lestocq was obliged to interfere in affairs foreign to his province. This circumstance, and the frankness of his character, increased the number of his enemies, who succeeded in exciting the suspicions of the empress. Lestocq was arrested in 1748, and confined in the fortress of St. Petersburg for trial. At first, he bore this change of circumstances with cheerfulness and calmness; but when he was to be subjected to the rack, he con-

fessed himself guilty. He was deprived of all his honors and estates, and banished to Uglitsch, where he remained three years, and then to Ustjug-Veliki, where he was in prison nine years. His third wife, Maria Aurora, shared the fate of her husband with an exemplary firmness. When Peter III ascended the throne, Lestocq was restored to his honors. Catharine II continued his pension without his offices. He died in 1767.

LESTRANGE, sir Roger, a political partisan and controversialist, was the youngest son of sir Hammond Lestrange, knight, of Hunstanton-hall, Norfolk, where he was born in 1616. His father, being a zealous royalist, brought up his son in the same principles. At the age of 22, he attended Charles I in his expedition into Scotland, and laid a plan for surprising Lynn, but being detected with the king's commission in his pocket, he was tried by a court martial, as a spy, and condemned. He was, however, respited from time to time, until he had lain in prison four years, when, by the connivance of his gaoler, he made his escape to the continent. On the dissolution of the long parliament, he returned home. On the restoration, he was made licenser of the press—a profitable post. In 1663, he set up the Public Intelligencer, which he discontinued on the design, then concerted, of publishing a London Gazette, the first number of which appeared February 4, 1665. In 1679, he set up a paper, called the *Observer*, in defence of the measures of the court. In 1687, he was obliged to give up the *Observer*, because he could not agree with James, who had knighted him, in the doctrine of toleration, although he had written in favor of the dispensing power. His death took place in 1704, at the age of 88, his faculties having become impaired some years before. He was the author of a great number of political tracts, full of coarse and virulent abuse, and in a style so rude and vulgar, that he was regarded by Granger as one of the great corruptors of the English language. Lestrange translated Josephus (his best work), Cicero's Offices, Seneca's Morals, Quevedo's Visions, &c.

LESUEUR, Eustache, one of the most distinguished French painters, born at Paris, in 1617, was instructed in drawing by his father, a statuary, and was afterwards placed at the school of Simon Vouet, the true founder of the French school of painting. He soon distinguished himself by several pieces in the true Italian style; but his

reputation was not completely established till he had executed his paintings for the Carthusian monastery in Paris. In 22 pictures, he delineated (1649—1651), the principal scenes in the life of St. Bruno, the founder of the order. Lithographic sketches of this work were published at Paris, in 1822 and 23. In 1650, he painted, for the corporation of goldsmiths, the preaching of the apostle Paul at Ephesus. This painting was presented to the church of Notre-Dame, and was exhibited annually on the first of May. His next works were a *Magdalen* and a *St. Lawrence*, and, in 1651, two scenes from the life of St. Martin, &c. Among the most distinguished of his later works are some mythological scenes in the hotel Lambert relating to Cupid and the Muses with Apollo. After completing this work, he died, in the 38th year of his age. Incessant toil, and the jealousy of his companions in art, brought him to his grave. His countrymen call him the *French Raphael*, and it is not to be denied that he had great merit. His conceptions are noble and elevated; his composition is simple, careful, and well arranged; the drawing is correct, in good taste, and proves his diligent study of the antique and of the great Italian masters, particularly of Raphael; his drapery is artfully disposed, and executed with great truth. His figures are full of animation and character; the positions are various, and free from manner. He displays great boldness and freedom of pencil; his coloring is delicate and simple, but deficient in truth and vigor, which sometimes renders his pictures too uniform, and occasionally they have too much ornament. That Lesueur should have reached so great excellence, is the more remarkable, as he had never been out of France, hardly even out of Paris, and had consequently formed himself after the few models of the ancient art and the Italian school to be found there. He had studied Raphael chiefly through the engravings of Mark Antony. Lesueur, from his education, may be considered as the true representative of the French school; for Poussin, who was a superior artist, belongs more to the Italians than to the French. His mild and ingenuous character made him generally esteemed, although the jealousy of his competitor Lebrun, who tyrannized over the taste and opinions of the day, prevented him from enjoying the reputation which was justly due him in his lifetime.

LESUEUR, Jean Baptiste, a musical composer, a descendant of the great painter

Lesueur, born in 1763, was placed in the musical school of the cathedral of Amiens, and, after completing his musical studies, was made director of music in the cathedrals at Sees and Dijon, and, in 1784, in the church of the Innocents, at Paris. In 1786, in opposition to several candidates, he received the place of master in the cathedral of Paris, and his elevated and impressive compositions, no less than the excellent manner in which he led the orchestra, made him a universal favorite. His own inclinations, and the advice of Sacchini, induced him to compose for the theatre. Telemachus was his first opera, which was brought forward with great success in the theatre Feydeau. In 1788, Lesueur resigned his place at Notre-Dame, that he might devote his time to theatrical music, and lived, till 1792, with his friend and patron Bochart de Champagny, in whose house he applied himself so laboriously, that his host, anxious for his health, would not allow him lights for more than half the night. Lesueur was at that time engaged in writing his opera *La Caverne*: one night, his light went out, and, unable to endure any interruption, he lay on the floor before the fire, and continued to write by the feeble light afforded by a few pieces of wood, until he was found in that situation the next morning, by Mr. Champagny. After various disappointments, he finally succeeded, in 1793, in introducing this opera on the stage, which met with the most brilliant applause. On Chenier's proposition, he was made professor of music in the national institute, and wrote several pieces of music for festivals, during the time of the republic; was afterwards displaced by intrigue, but again restored by Bonaparte. In 1793, he composed *Paul et Virginie*, the Death of Adam, and the Bards. This last and finest work, in which the composer appears to have called up the very spirit of Ossian, delighted Napoleon to such a degree, that he made him chapel-master at the Tuileries, conferred on him the order of the legion of honor, and presented him a gold snuff-box, with the inscription "The emperor of the French to the author of the Bards." Lesueur wrote, in connexion with Cherubini, Méhul, Langlé and Rigal, the work published by Catel (1816), *Sur les Principes élémentaires de Musique*. He also wrote *Essai sur la Musique sacrée* (1787), and *Lettres et Réponse à Gaillard, sur l'Opéra de la Mort d'Adam, et sur plusieurs Points d'Utilité relatifs aux Arts et aux Lettres* (1801).

LETHARGY (*lethargus*, from ληθη, forget-

fulness); a heavy and constant sleep, with scarcely any intervals of waking. When awakened, the person answers, but, ignorant or forgetful of what he said, immediately sinks into the same state of sleep. It is considered as an imperfect apoplexy, and is mostly symptomatic.

LETHE; a river of the lower regions, celebrated in ancient mythology, whose water had the power of making the souls of the departed, who drank of it, forget all their sufferings on earth. Those spirits, in particular, drank of it, who were destined to return to the upper world in new bodies, in order to forget the pleasures enjoyed in Elysium.

LETO. (See *Latona*.)

LETTER OF ATTORNEY. (See *Attorney*.)

LETTER OF MART, or of MARQUE; a commission granted to the commander of a merchant ship, or privateer, to cruise against and make prizes of the enemy's ships and vessels, either at sea or in their harbors, under pretence of making reprisals for injuries received. The ship so commissioned is also called a *letter of mart* or *marque*.

LETTERS. (See *Types*, and *Writing*.)

LETTER-WRITING. Among the letters celebrated in French literature are those of madame de Sevigné, Ninon de Lenclos, Babet, Racine, Voltaire, and the collection of Richelet; in English literature, the letters of James Howel, sir William Temple, Addison, Pope, Swift, Bolingbroke, lady Montague, Chesterfield, Gray and Cowper, are celebrated; in Italian, those of Manuzio, Ludovico Dolce, cardinal Bembo, Bentivoglio, Bernardo Tasso, those collected by Lud. Dolce and Annibal Caro, those of Pietro Aretino, Aligarotti and Gasparo Gozzi; in German literature, the letters of Lessing, Winckelmann, Klopstock, Wieland, Gellert, Weisse, Jacobi, Garve, Abbt, Sturz, Gleim, Bürger, Lichtenberg, J. von Müller, Matthisson, &c. Bolingbroke made use of the epistolary form for treating philosophical subjects (for instance, the study of history), and Richardson applied it to novels. The Germans also have didactic letters by Mendelssohn, Jacobi, Herder, J. von Müller and J. G. Müller. In the French as well as the Italian literature, letters form a very considerable branch, and large collections of them exist, among which are the following: *Lettres historiques* (14 vols., Hague, 1692—1698, 12 mo.); *Lettres historiques et galantes par Madame de Noyer* (6 vols., Utrecht, 1713, 12mo.); *Lettres édifiantes et curieuses, écrites des Missions étrangères* (34 parts in 32 vols.,

Paris, 1717—1776, 12mo.; new edition, 26 vols., Paris, 1780—1783, 12mo.; also in 26 vols., Toulouse, 1810—1812, 12mo., and an atlas; *Nouvelles Lettres édif.* (6 vols., Paris, 1819); *Lettres sérieuses et badines* (12 vols., Hague, 1729—1740); *Lettres Juives* (6 vols., Amsterdam, 1736; new edition, 1741); *Lettres caballistiques* (6 vols., Hague, 1781); *Lettres Chinoises* (5 vols., Hague, 1739); *Lettres Portugaises* (2 vols., Paris, 1796). Among the Italian collections, are *Lettere vulgari di diversi nobilissimi Huomini et eccellentissimi Ingegneri* (3 vols., Venice, 1564, also 1567); *Lettere d'Uomini illustri, che fiorirono nel Principio del Sec. XVII* (Venice, 1744); *Lettere Senesi sopra le Belle Arti* (3 vols., with engravings, Venice and Rome, 1762—1786, 4to.).

LETTUCE (*lactuca sativa*); a smooth, herbaceous, annual plant, containing a milky juice, which has been cultivated from remote antiquity, and is in general use as a salad. The original locality is unknown. The stem grows to the height of about two feet, and bears small pale-yellow flowers; the inferior leaves are sessile, and undulate on the margin. The young plant only is eaten, as it is narcotic and poisonous when in flower. Twenty species of *lactuca* are known, from various parts of the globe, and one or more of them inhabit the U. States.

LEUCADIA (at present, Santa Maura, 112 square miles, 17,500 inhabitants); an island belonging to the republic of the Ionian Islands (q. v.), on the western coast of Greece. The southern extremity (on which stood a temple of Apollo), at present cape Ducato, in the vicinity of the capital, Leucas (at present, St. Maura), was called by the Greeks the *Leucadian rock*. It was famous for the festival annually celebrated there, and the (so called) *Leucadian leap*. At every festival, a criminal was thrown from the rock into the sea, as a sin-offering, loaded, as it were, with all the sins of the people. He wore a dress of feathers, and even living birds were fastened to him, so that he generally fell gently, without much injury, into the deep, whence he was taken out, but was obliged to leave the country forever. No less remarkable was the leap, which many performed of their own accord, from this rock, to free themselves from the tortures of unhappy love. It is said that some tried it more than once; but the unhappy lovers generally met with death in the waves. Among the latter are mentioned two females—Artemisia, queen of Caria, and Sappho. (See *Sappho*.)

LEUCÆTHIOPS. (See *Albino*.)

LEUCHTENBERG; a lordship (before 1806 a landgraviate, with a princely title, and a seat and vote in the diet), situated in the ancient Nordgau, on the river Nab, in the Upper Palatinate, in the Bavarian circle of Regen. It comprises 84 square miles, with 5300 inhabitants. Pfreimbt is the chief place. The late king of Bavaria conferred the lordship, in 1817, on his son-in-law Eugene, ex-vice-roy of Italy, with the principality of Eichstädt, held immediately of the crown. Eugene took the title of duke of Leuchtenberg, and made over to the crown of Bavaria the 5,000,000 of francs, which the king of the Two Sicilies was bound to pay him for his Neapolitan dotations. His dotations in the Lombardo-Venetian kingdom were given up to Austria, for 7,000,000, and he retained possession of those in the Mark of Ancona, the income of which is estimated at 850,000 francs annually. The income of the duke (exclusive of the interests of his large capital) amounts to 1,600,000 francs. The present duke Augustus was born December 9, 1810. His sister Josephine, born March 14, 1807, is crown-princess of Sweden; Amelia, born July 31, 1812, ex-empress of the Brazils. There are several other children.

LEUCIPPUS; the founder of the atomic school in Greek philosophy, and teacher of Democritus. By some, he is said to have been a native of Abdera; by others, of Elea; and by others, of the island Melos. He lived 500 years B. C. His instructor was Zeno the Eleatic. To settle a contest between reason and sensible experience, which had been mainly excited by the Eleatic school, he invented his system, which he opposed to that of the Eleatics. The more ancient Eleatics denied the reality of motion, vacuity of space, and plurality of matter, reducing all that exists to a single, eternal and immutable substance. Leucippus, on the contrary, assumed the infinity of space. In this space, there are, according to his views, an infinite quantity of particles of matter, too minute to be perceptible to the senses. In themselves, they are indivisible (thence the name *atoms*); for, if an infinite divisibility were ascribed to them, they would at last disappear into nothing. Now, these atoms move from eternity in infinite space, and, by their union and separation, form the origin and end of things. Since unity can never become plurality, nor plurality become unity, the atoms cannot, by their connexion, produce a true unity, but mere aggregations. In sub-

stance, all the atoms are similar, but of an infinite variety of shapes, by which is explained the variety of bodies formed by them. Atoms are moreover distinguished by their local situation, and the order in which they are compounded. Situation and order are the fundamental properties of the atoms; from their union and separation arise properties of the second order (*qualitates secundariæ*), such as hardness, softness, color, sound, smell, &c. As far as can be deduced from the imperfect notices which we have, Leucippus explained the origin of the world by the motion of atoms, in the following manner:—From the infinity of atoms, some broke loose, and, becoming confused, produced a rotary motion, by means of which, similar particles were associated with similar particles, while the dissimilar were repelled. From the necessary inequality of the velocity of the bodies, the smaller were driven to the outside, and formed, as it were, an envelope around a kernel. The grosser bodies of this envelope sunk downwards, and, by their mutual collisions, attenuated the envelope. The bodies that sunk downwards compose the earth; the envelope itself was finally inflamed, and gave rise to the stars. To fire he ascribed round atoms. The atoms composing the other elements—water, air and earth—were distinguished merely by magnitude. Fire, as the most subtle, the lightest and most fluid element, he made the soul of the world, the principle of life, sensation and thought. These last modifications, however, according to Leucippus, were not always founded in the nature of atoms, but merely in the mode of their aggregation. The intellectual substance (consisting of particles of fire) is diffused through the whole body. Men and animals inhale it with the atmosphere, and hence life ceases with the end of respiration. There is nothing said in his system respecting the soul of the universe, a providence or Deity.

LEUCITE, or AMPHIGENE, is a mineral which occurs in little masses, having the appearance of crystals rounded by attrition; also in crystals whose form is that of the trapezohedron, apparently with cleavages parallel to the rhombic dodecahedron and cube, the latter of which, being the most simple of the two, has been adopted as the form of the primary crystal. Color grayish white; translucent; lustre vitreous; fracture conchoidal; specific gravity 2.37. Before the blow-pipe alone, it is infusible; with borax, it fuses into a transparent glass. It consists of 53.75 silic,

24.62 of alumine, and 21.35 of potash. It is found only in volcanic and trap rocks. The lavas of Vesuvius and basalts of Italy abound with it. It is especially abundant between Rome and Frascati.

LEUCO; two syllables found in many scientific terms or geographical names, derived from the Greek λευκός, white.

LEUCOTHEA. (See *Imo*.)

LEUCTRA; a village in Bœotia (at present, Livadia), famous for the great battle in the year 371 B. C., which the Theban Epaminondas won over the Spartan king Cleombrotus, thus putting an end to the great influence which Sparta had exerted for several centuries over all Greece.

LEUSDEN, John; a celebrated biblical critic and theologian, born in 1624, at Utrecht, where he afterwards obtained the professorship of Hebrew, with the reputation of being one of the most erudite scholars and able divines of the age. He published a new edition of the books of the Old Testament, in the original Hebrew (in 2 vols., 8vo.), and of those of the New, in Greek and Latin (one thick 12mo.); a Hebrew and Latin Lexicon; an edition of Poole's Synopsis (5 vols., folio); *Versio Septuaginta Interpretum*; *Clavis Græca Novi Testamenti*; *Onomasticon Sacrum*; *Philologus Hebræus*; *Philologus Hebræomixtus*; *Clavis Hebræica et Philologica Vet. Test.*; a Hebrew Psalter, and Commentaries on the Books of the Prophets Joel, Hosea, and Jonah. Leusden died in his native city, about the close of the seventeenth century.

LEUTHEN; a village in Lower Saxony, west of Breslau, famous on account of a battle gained here by Frederic the Great, Dec. 5, 1757, over prince Charles of Lorraine. (See *Seven Years' War*.)

LEUWENHOEK, Anthony; a celebrated natural philosopher, born at Delft, in Holland, in 1632. His skill in grinding optical glasses led the way to the making of microscopical observations, which procured him no small degree of fame. He began to publish an account of his discoveries in the English Philosophical Transactions, in 1673; and they are continued from No. xciv to No. cclxxx of that collection. In 1680, he was chosen a fellow of the royal society; and, in 1698, he entertained the czar Peter the Great, then at Delft, with an exhibition of his experiments. He appears to have passed the whole of his life at his native place, devoting his time to microscopical researches, chiefly relating to anatomy. He died in 1723. A Latin translation of his works in the Dutch language was publish-

ed between 1695 and 1719 (4 vols., 4to.), under the title of *Arcana Naturæ detecta*, and reprinted at Leyden, in 1722. His industry was great, but preconceived opinions sometimes led him to erroneous conclusions.

LEVAILLANT, Francis, a celebrated traveller, born at Paramaribo, in the Dutch colony of Guiana (Surinam), from childhood displayed a passion for the study of natural history, particularly of ornithology. His desire of extending his knowledge by travelling in the most distant lands was increased in Europe. In Amsterdam, he found a patron in the person of Temmink, the great ornithologist, who warmly encouraged his plans, in the hope of obtaining, through him, great accessions to his excellent collections in natural history, particularly ornithology—a hope which was not disappointed. Levaillant first proceeded to the cape of Good Hope, whence he advanced into the interior of Africa. The specimens which he collected on this occasion were entirely lost. The ship in which they were embarked for Holland was attacked by the English, and burned in the course of the action. Supported by Temmink, Levaillant renewed his labors, and, with a tolerably large caravan, directed his course to the countries on the north of the colony. Insurmountable obstacles prevented him from pursuing his adventurous researches so far into the interior as he wished. The fruits of his labors were, however, important. He was not less fortunate in a second excursion. Levaillant died at Paris, November, 1824, aged 70. It has been objected to his accounts, that they are not always accurate, and that they are often improbable, though this cannot be satisfactorily shown. His readers are interested by his lively descriptions, and by an attractive philosophical originality. His accounts of his first and second excursions were published in French, in 1789 and 1796. He also left some works on natural history, and some separate treatises. The most important of these works are *Histoire naturelle des Oiseaux d'Afrique* (1799—1807, in 50 numbers, folio), and the *Histoire naturelle des Perroquets* (1801—1805, 2 vols., folio).

LEVANT (Italian, *il Levante*; French, *le Levant*; the east). This term is applied, in a general sense, to the countries on the eastern coast of the Mediterranean sea, and, in a more contracted sense, to the Asiatic coasts of the Archipelago, from Constantinople to Alexandria, in Egypt. The most famous of the commercial cities

of the Levant, taken in this narrow sense (among the French, *échelles du Levant*), besides Constantinople and Alexandria, are Smyrna, Scanderoon (Alexandretta), and Aleppo. Smyrna, with 100,000 inhabitants, is the principal commercial place of the Levant, and the grand mart of the Asiatic trade. This Levant Proper is under the Turkish dominion, has a very warm climate, many mountains, and very fertile plains, and is inhabited by Turks, Armenians and Greeks. The staples are grain, rice, tobacco, olives, cotton, silk, Angora goat's hair, safflower, and some minerals. The *Levant coffee*, as it is called, does not grow in the Levant, but in Arabia, and has this name because it is exported from the ports of the Levant. (See Turner's *Travels in the Levant*, London, 1820, and count Forbin's *Travels in the East*.)

LEVEE (from the French *lever*, to rise, and the time of rising) is a word used in high life, or court language, for the ceremonial visits which great personages receive in the morning, as it were at their rising. The levee is distinguished from the drawing-room, inasmuch as, at the levee of a gentleman, gentlemen only appear, and at the levee of a lady, only ladies, while, at the drawing-room, ladies and gentlemen both are admitted. At the levees and drawing-rooms of the sovereigns, persons of distinction, or young members of noble families, are introduced. On the first presentation of daughters of dukes, marquises and earls, it is customary for the queen of England to kiss them on the cheek. The word *levee* is also used in the U. States for the reception of company by the president.

LEVÉE (French); an embankment on the margin of a river, to confine it within its natural channel. The lower part of Louisiana, which has been formed by encroachments upon the sea, is subject to be inundated by the Mississippi and its various branches, for a distance of more than 300 miles. In order to protect the rich lands on these rivers, mounds are thrown up, of clay, cypress logs, and green turf, sometimes to the height of 15 feet, with a breadth of 30 feet at the base. These, in the language of that part of the country, are called *levées*. They extend for hundreds of miles; and, when the rivers are full, cultivated fields, covered with rich crops, and studded with villages, are seen lying far below the river courses. The giving way of these *levées*, sometimes occasioned by a sudden and violent pressure of the water, and sometimes by acci-

dental perforations, is called a *crevasse* (French, a disruption).

LEVÉE-EN-MASSE (universal rising); a military expression for the rising of a whole people, including all capable of bearing arms, who are not otherwise engaged in the regular service. When animated by patriotic feelings, it is the most formidable obstacle which an enemy can encounter; and it is unconquerable, if favored by the nature of the ground, because almost every advantage is on the side of the people. They fight on their own soil; they know the ground; they find support and assistance in every house, from every woman and child; they fight for their own hearths; they enclose the enemy on all sides, and can destroy whatever may be useful to him, cut off his communications, pursue, annoy, disturb, assail, harass him incessantly, so that he can effect nothing except getting possession of the strong places. It is called *Landsturm* (landstorm), in German, in distinction from the *Landwehr* (militia). This distinction was first made in 1796, when the peasants of Bavaria and Franconia fell upon the rear of the flying French, under Jourdan, with much success. The *Landsturm* was yet more effective in 1799, and, in 1813, the governments of Northern Germany called it forth in every part of the country. It consisted of every male person capable of bearing arms of any sort, whom age or other reasons exempted from the militia service. Orders were issued to turn every thing into weapons, to defend the country by every means, and to injure the enemy in all possible ways, by destroying provisions and wells, attacking stragglers, intercepting couriers, and escorting prisoners. The *Landsturm* was useful at the siege of several fortresses. Its organization was founded on municipal divisions. Napoleon ordered the *levée-en-masse*, when the allies entered France, and it threatened to become dangerous to them; but the capture of Paris put an end to the war. We all know how effectual the *levée-en-masse* was in Spain, where even women took part in it, and in Tyrol, under Hofer (q. v.). At present, we witness a *levée-en-masse* in Poland. The French national guard, with its different classes, might be considered a *levée-en-masse*, organized on a gigantic plan. The chief difference between a *levée-en-masse* and militia is, that, in the former, all persons are comprised not included in the latter; that they do not march far from home; and that their service is more irregular, and even owes

its strength, in some measure, to this irregularity.

LEVEL; a mathematical instrument used for drawing a line parallel to the horizon, and continuing it at pleasure, and, by this means, for finding the true level, or the difference of ascent or descent between several places, for conveying water, draining fens, placing the surfaces of floors, &c., level, and for various other purposes in architecture, agriculture, hydraulics, surveying, &c. There is a great variety of instruments for this purpose, differently constructed, constituted of different metals, according to the particular purposes to which they are applied; as the carpenter's level, mason's level, balance level, mercurial levels, surveying and spiral levels; but, however their construction may vary, they may all be referred to the following three classes: 1. those in which the vertical line is determined by a suspended plumb-line or a balance-weight, and the horizontal position is shown by a line perpendicular to it; 2. those which determine a level line by the surface of a fluid; 3. spirit levels, which point out the horizontal direction by a bubble of air floating in a fluid contained in a glass tube. 1. Those of the first kind, depending upon the plumb-line, are very common, but not very accurate. The simplest form is that of two rulers united in the form of the letter L; they must be exactly perpendicular to each other; then, if a plumb-line is suspended from the top of the vertical ruler, and the edge thereof be made to coincide with the plumb-line, the other ruler must be horizontal. This, when applied to the top of a wall, a beam, or a floor, will show if they are horizontal. This is the kind of level used by artificers; sometimes it is formed like the letter A, of three rulers, the plumb-line being suspended from the vertex, and the two legs set on the surface to be levelled. The line hangs opposite to a mark made on the middle of the cross ruler, when the feet are on the same level. Sometimes the horizontal piece crosses the perpendicular at its foot, and the plumb, suspended from the top of the perpendicular, is received in an opening at their junction. 2. The *water level* shows the horizontal line by means of a surface of water or other fluid, founded on this principle, that water always places itself horizontally. The most simple kind, made of a long wooden trough, which is filled with water, shows on its surface the line of level. This is the ancient *chorobates*. The water level is also made

with two cups fitted to the two ends of a straight pipe, an inch in diameter, and four feet long. The water communicates from one cup to the other; and this pipe being movable on its stand by a ball and socket, when the two cups are seen to be equally full of water, their two surfaces mark the line of level. This instrument, instead of cups, may also be made with two short cylinders of glass, three or four inches long, fastened to each extremity of the pipe with wax or mastich. The pipe, filled with colored water, shows itself through the cylinders, by means of which the line of level is determined; the height of the water, with respect to the centre of the earth, being always the same in both cylinders. This level, though very simple, is yet very commodious for levelling small distances. 3. The *spirit* or *air level* shows the exact level, by means of a bubble of air, enclosed, with some fluid, in a glass tube of an indeterminate length and thickness, and having its two ends hermetically sealed. When the bubble fixes itself at a mark in the middle of the tube, the case in which it is fixed is then level. When it is not level, the bubble will rise to one end. This glass tube may be set in another of brass, having an aperture in the middle, where the bubble may be observed. The liquor with which the tube is filled, is oil of tartar, or *agua secunda*, those not being liable to freeze, as common water, nor to rarefaction and condensation, as spirit of wine is. These instances will explain the principle of the different kinds of levels. Their varieties are too numerous to be described here.

LEVEN, LOCH; a lake of Scotland, about 12 miles in circumference, in the county of Kinross. It contains four islands, on one of which was formerly a priory, and on another stand the remains of the castle of Loch Leven, once a royal residence, which was granted by Robert III to Douglas. In this castle Mary Stuart was confined, after her separation from Bothwell, and her capture by the confederate lords, at the battle of Carberry Hill. After several unsuccessful attempts, she made her escape, by the aid of George Douglas, her keeper's brother.

LEVER, in mechanics; an inflexible right line, rod, or beam, supported, in a single point, on a fulcrum or prop, and used for the raising of weights, being either void of weight itself, or, at least, having such a weight as may be commodiously counterbalanced. The lever is the first of those called *mechanical powers*, or *simple machines*, as being, of all others, the

most simple; and is chiefly applied for raising weights to small heights. (See *Mechanics*.)

LEVESQUE, Peter Charles; a French writer on history and general literature, born at Paris, in 1736, and, when young, apprenticed to an engraver. Displaying a strong inclination for learning, he was removed to the *collège Mazarin*, where he studied with great success. His family having retired into the country, he, for some time, supported himself at Paris, by working as an engraver. In 1773, he went to St. Petersburg, with a recommendation from Diderot to the empress of Russia, who appointed him professor of belles-lettres at the school of noble cadets. Here he formed the design of writing the history of Russia, and, having completed the work, in 1780 he returned to Paris to publish it. He was admitted into the academy of inscriptions, and, some years after, was appointed professor at the royal college. He was subsequently made a member of the national institute; and, in 1812, closed a long life devoted to literary pursuits. Besides his Russian history (4th ed., with notes by Malte-Brun and Depping, 8 vols., 1812, a standard work on Russia), he produced a translation of Thucydides; a History of France, under the five first Kings of the House of Valois; a Critical History of the Roman Republic (3 vols.); Studies in ancient History, and in the History of Greece, and many other translations and valuable works.

LEVI; the third son of Jacob and Leah. The prince of the Schemites having ravished his sister Dinah, he, with his brother Simeon, attacked their city while they were suffering the consequences of circumcision, to which they had submitted, and murdered all the males. Jacob reproaches them with this act of cruelty, on his death-bed, and threatens them with the dispersion of their descendants. Moses and Aaron were of this tribe. The Levites were set apart, by Moses, for the service of religion, thus forming a hereditary caste of priests, or religious ministers, who received territories scattered about in the lands of the other tribes. The third book of Moses is called *Leviticus*, as it relates principally to the organization of the ministry. The Mosaic law is sometimes also called the *Levitical law*. (See *Moses*.)

LEVIATHAN (*Hebrew*) is compounded of two words, meaning a *great fish*, and *fastened*; hence it probably means a huge fish covered with close scales. The Septuagint renders it *δρακων* (a dragon), and *κητων* (a whale). From the description given of it

in the book of Job (*xl.*), it is usually considered to mean the crocodile, though some have supposed it to be a whale. (See Harris's *Natural History of the Bible.*)

LEVITES. (See *Levi.*)

LEVITICUS. (See *Levi.*)

LEWIS; one of the largest and most northerly of the Hebrides, on the coast of Scotland, parted, by two arms of the sea, into two divisions, the southern of which is called *Harris*, and the northern *Lewis*. It extends south-west and north-east 82 miles, and it is from 10 to 23 miles in breadth, containing an area of 902 square miles, or 451,000 acres. It lies between 5° 40' and 7° 10' W. lon., and 57° 54' and 58° 28' N. lat.; population, in 1808, 13,942; 30 miles W. Assynt Point, in Sutherland.

LEWIS, Matthew Gregory, an English writer, whose attempts, both in the departments of the drama and of romance, obtained, at one period, a very considerable share of popularity, though but too frequently disfigured by bad taste, and degraded by licentiousness, was the son of a gentleman of good property, who was under-secretary at war. The subject of this article was born in the metropolis, in 1773, and educated at Westminster; on quitting which he travelled for improvement, especially into Germany, the literature of which country produced a strong impression upon him, and gave that peculiar turn to his compositions, which placed him in the foremost rank among the delineators of the marvellous and terrific, and has since loaded the shelves of circulating libraries with hosts of imitators, most of whom exhibit all the extravagances without the genius of their model. Of his writings, the first and most celebrated was the *Monk*, a romance, in 3 vols., 12mo, which, although much derided for its licentiousness, ran through a great number of editions; *Feudal Tyrants*, ditto, 4 vols.; *Romantic Tales*, 4 vols.; *Tales of Wonder*, in verse, 1 vol., 8vo.; *Tales of Terror*, 1 vol., 8vo.; the *Castle Spectre*, a romantic drama; *Adelmorn the Outlaw*, ditto; *Venoni*, a tragedy; a volume of miscellaneous poetry, and the *Bravo of Venice* (a translation from the German), 1 vol., 8vo. Mr. Lewis had a seat in parliament, but seldom took part in the business of the house. His death took place in 1818, at sea, while on his voyage home from a visit to his West Indian possessions.

LEWIS, Francis, one of the signers of the declaration of American independence, was born in 1715, in South Wales, and educated at Westminster school, England.

He chose, however, mercantile pursuits; converted his patrimony into merchandise at the age of 21, and sailed for New York, whence he proceeded to Philadelphia. Here he remained for two years, and then returned to New York. In the disputes between the mother country and the colonies, he sided zealously with the latter. In 1775, he was unanimously elected to the continental congress, from New York. His commercial knowledge and habits rendered him particularly serviceable to that body. He suffered much, in the course of the revolutionary war, by the devastation of his estate, and by personal imprisonment, having fallen into the hands of the British. Through the influence of Washington, he was exchanged before the end of the contest. Mr. Lewis died Dec. 30, 1803, in his 89th year. His latter days were passed in comparative poverty, the fortune which he had acquired by trade having been, in great part, sacrificed on the altar of patriotism.

LEWIS, Meriwether, a celebrated explorer, was born near the town of Charlottesville, in Virginia, August 18, 1774. His father, a man of independent fortune, died when he was yet a child. He very early gave proofs of that bold and enterprising disposition for which he was subsequently so distinguished. At the age of 18, he relinquished academic studies, and engaged in the pursuits of a farmer, with which he continued to occupy himself until he was 20. General Washington having called out a body of militia, in consequence of the disturbances in the western parts of the country, produced by discontent at the excise taxes, young Lewis enrolled himself in it as a volunteer, and from that situation was removed to the regular service. In 1803, president Jefferson proposed to congress to send some competent person on an exploring expedition to the western part of our northern continent, who might ascend the Missouri, cross the Stony mountains, and descend the nearest river to the Pacific. Congress having approved the proposition, and voted a sum of money for carrying it into execution, captain Lewis, who had then been nearly two years with Mr. Jefferson as his private secretary, was chosen for that purpose. The following testimony of Mr. Jefferson gives an idea of his fitness for the task: "Of courage undaunted; possessing a firmness and perseverance of purpose which nothing but impossibilities could divert from its direction; careful as a father of those committed to his charge, yet steady in the maintenance of

order and discipline; intimate with the Indian character, customs and principles; habituated to the hunting life; guarded, by exact observation of the vegetables and animals of his own country, against losing time in the description of objects already possessed; honest, disinterested, liberal, of sound understanding, and a fidelity to truth so scrupulous, that whatever he should report would be as certain as if seen by ourselves: with all these qualifications, as if selected and implanted by nature, in one body, for this express purpose, I could have no hesitation in confiding the enterprise to him." That there might be some person with him to assume the conduct of the expedition in case of accident to himself, William Clarke was appointed, at Lewis's request, to accompany him, and received a commission of captain. (For the particulars of this expedition, see the account which has been published of it—*Expedition, &c.*—Philadelphia, 1814, 2 vols.). It was highly successful, and occupied three years, the party engaged in it having set out in the summer of 1803, and returned in the autumn of 1806. Lewis was soon afterwards made governor of the territory of Louisiana, and Clarke a general of its militia, and agent of the U. States for Indian affairs. On the new governor's arrival at St. Louis, the seat of administration, he found the country torn by dissensions; but his moderation, impartiality and firmness soon brought matters into a regular train. He was subject to constitutional hypochondria, and, while under the influence of a severe attack of this disorder, put an end to his life, in 1809, at the age of 36.

LEWIS'S RIVER; a river of North America, which rises in the Rocky mountains, and runs north-west into the Columbia, 413 miles from its mouth; length, about 900 miles.

LEXINGTON; one of the principal towns of Kentucky, capital of Fayette county, on a branch of the Elkhorn, 22 miles S. E. of Frankfort, 85 S. of Cincinnati; lon. 84° 18' W.; lat. 38° 6' N. The place derived its name from the circumstance that some hunters were engaged on the spot in laying out a town (1775), when a messenger arrived with the news of the battle of Lexington, and they immediately decided to commemorate that event by giving the name to the place. Population, in 1830, 5699. The town is regularly laid out, some of the streets are paved, and the buildings are, many of them, large and handsome. The environs are beautiful,

and highly cultivated. The manufactures of woollen, paper and cotton are numerous and important; but the staple manufactures of the place are cordage and bagging. Among the public buildings are the court-house, bank, market-house, lunatic asylum, and eight churches, of which the Presbyterians have three, the Methodists, Episcopalians, Baptists, Seceders and Roman Catholics, one each. The U. States bank has an office of discount and deposit there. Transylvania university, at Lexington, was incorporated in 1798, and organized anew in 1818. In 1830, it had 143 under-graduates, 62 in the preparatory department, 200 medical students, and 19 law students.

LEXINGTON, a small town in Massachusetts, about twelve miles north-west of Boston, and six south-east of Concord, is remarkable, in the history of the American revolution, as the place where the first British blood was shed in armed resistance to the mother country. On the evening of April 18, 1775, a detachment of British troops was sent from Boston, by general Gage, for the purpose of seizing some provincial stores at Concord. Notice of this movement having been communicated to the inhabitants on the route, the militia of Lexington, about 70 men in number, were hastily drawn up on the common, by which the road to Concord passes. The English commander, colonel Smith, having commanded them to disperse without effect, ordered his men to fire. Seven Americans were killed, and three wounded, and the company dispersed, several of the militia discharging their muskets as they retreated. The British troops then pushed on to Concord, the Americans retiring beyond the river which flows by the village. One hundred men were detached to destroy the bridge, across which the colonists had retired; they were, however, repulsed by the latter, and, at noon, the whole detachment took up the march for Boston. The militia of the neighboring towns had meanwhile been collected, and began to hang upon the rear of the British with an irregular but destructive fire from every favorable position. At Lexington, the enemy was relieved by a reinforcement of 1000 men, but was still pursued in the same galling manner till their arrival at Charlestown, in the evening. (See *Phinney's History of the Battle at Lexington*, Boston, 1825.) A simple monument of granite, bearing the names of those who fell, was erected at Lexington by the commonwealth of Massachusetts, in 1799.

LEX LOCI CONTRACTUS (*conflict of*

laws). It is a general doctrine, that every government has jurisdiction of persons within its territories, and also of acts done within them. It follows, that all contracts made, and obligations assumed, have an implied reference to the laws of the place of the transaction, unless it appear otherwise on the face of the contract. Some contracts, however, have reference to different places for their execution, as a bill of lading for a foreign voyage, a foreign bill of exchange, and many others. Such contracts necessarily refer to the laws of other countries than that in which the contract is made, in respect to the acts contemplated to be done abroad. The manner of execution of the contract must, in this respect, be governed by the foreign laws. But, for the purpose of ascertaining the meaning of the parties, regard is necessarily had to the language, laws and customs of the place where it is made. In neighboring territories subject to different jurisdictions, where there is much business and intercourse between the inhabitants of the different territories, as is, or, at least, formerly was, the case in the different provinces of Holland and the Netherlands, and the territories bordering upon them, questions frequently arise as to the code of laws which is applicable to particular acts of the parties, or provisions of contracts. Many questions have arisen in those countries, for instance, respecting the obligations and rights arising on the marriage contract, where the parties were married in one province or country, and afterwards removed to another. As to rights of property, consequent immediately upon a marriage, the laws of the place of marriage prevail; but it will often happen that these laws clash with those of the quarter to which the parties remove, and, in such cases, the general rule is, to give the laws of the place of the contract the preference, as far as is practicable. But it will sometimes happen that it is quite impossible to give them entire effect. The French law, for instance, makes the law of marriage, to many purposes, a pecuniary copartnership, and its provisions and remedies are adapted to this construction, and there is no difficulty in enforcing the rights of the wife under it. But in England and the U. States, it is quite otherwise, as the wife's personal property, and the use of her real estate, go to the husband, and her legal rights are in a great degree suspended during the marriage. If, therefore, parties, married in France, remove to England or the U. States, whatever respect might be paid to

the French law, and the rights and obligations, as to property, arising on the marriage contract under that law, the laws of England, or of the U. States, supply no forms of proceeding, and remedies adapted to such a construction of the contract. As to the acts done and the management of their property after their removal, therefore, they must be governed by the laws of the country of their residence. This question, as to the code of laws which is applicable, arises in relation to the adjustment of general average losses on vessels and their cargoes, it being a rule that such losses are to be adjusted at the port of delivery of the goods; and, where this is a foreign port, the adjustment is necessarily made according to the laws there prevailing. The implied contract between the parties to a bill of lading, to contribute to such average, where the contribution accrues abroad, has reference to the laws of the foreign port as to the proportion of the contribution.

LEY, or LEES; a term usually applied to any alkaline solution made by levigating ashes that contain an alkali. Soap-lees is an alkali used by soap-boilers, or potash or soda in solution, and made caustic by lime. Lees of wine are the refuse, or sediment, deposited from wine standing quiet.

LEYDEN (*Lugdunum Batavorum*); a large and beautiful city in the government of South Holland, in the province of Holland, kingdom of the Netherlands, situated on a branch of the Rhine, with 3000 houses and 28,600 inhabitants; lon. 4° 29' E.; lat. 52° 9' N. It has wide streets (the one called *Broad street* is among the finest in Europe) and numerous canals. The university of Leyden, formerly very celebrated, was founded in 1575, and is distinguished for its botanical garden, anatomical theatre, observatory, and valuable library with 60,000 volumes and 14,000 manuscripts. The number of students, in 1827, was 323. The *Annales Acad. Lugd. Bat.* are still continued. Cabinets of philosophical, surgical, chemical instruments, and one for natural history, belong to the university. Among the buildings, the principal are St. Peter's church, with the tombs of Boerhaave, Peter Camper and Meermann, and the stadthouse, which contains Luke of Leyden's excellent picture of the last judgment. A fine view of the whole city is enjoyed from the ancient castle, considered, traditionally, a Roman work. The printing establishments formerly constituted an important branch of the industry of Ley-

den, but are much less extensive at present. The city has woollen manufactures and considerable inland trade. The manufactures have much declined, but the salt-works are important. Leyden suffered much in January, 1807, from the explosion of a ship containing 40,000 pounds of gun-powder. The houses on the side of the canal were overturned, and many persons killed. Natives of Leyden are John of Leyden (q. v.), known as the leader of the Anabaptists, the celebrated Peter Muschenbroek, Rembrandt, Luke of Leyden, &c. It is connected with Haarlem, Hague and Delft by canals. Leyden was called by the Romans *Lugdunum Batavorum* (see *Batavians*), from which the present name was formed in the middle ages. Even in Ptolemy's time, Leyden was a considerable city. It suffered much during the war with Spain (1574).

LEYDEN, JAN or JOHN OF. (See *John of Leyden*.)

LEYDEN, LUKE OF. (See *Luke of Leyden*.)

LEYDEN, JOHN; a poet, antiquary and Orientalist, was born at Denholm, Scotland, in 1775, of parents in humble circumstances, and bred up to such country labor as suited his condition. In his earliest youth, he displayed the greatest eagerness for the acquisition of knowledge, but enjoyed few opportunities of gratifying it. His predominant desire for learning, however, determined his parents to prepare him for the church, and he was entered at the college of Edinburgh, in 1790, for the purpose of commencing his professional studies. Here, besides attending to theology, he cultivated medical studies, and, in addition to the learned languages, acquired French, Spanish, Italian, German, the ancient Icelandic, Arabic and Persian. After remaining five or six years in Edinburgh, he became private tutor to two young gentlemen, whom he accompanied to St. Andrew's, and, in 1799, published his *History of African Discoveries*, which has since been continued and enlarged by Hugh Murray (3 vols., 8vo., 1820). At this time, he was also the author of many poetical effusions in different departments, which appeared in the *Edinburgh Magazine*, and which, by rendering him known to the lovers of literature, introduced him into the best society in the Scotch capital. In company, he displayed the rudeness and independence, which his early life and education were fitted to produce in a man of strong feelings and vigorous genius, united with personal boldness, and much bodily

power and activity. In 1800, he began to preach, and, although popular as a pulpit orator, he was not satisfied with his own discourses. In 1801 and 1802, he assisted Walter Scott in procuring materials and illustrations for his *Minstrelsy of the Scottish Border*, and republished the *Complaynt of Scotland*, with a learned preliminary Dissertation, Notes and a Glossary. Having manifested a strong desire to set out on an expedition to explore the unknown regions of Africa, his friends, to prevent the execution of this project, procured him an appointment in India, which, however, could only be held by a person who had taken a surgical degree, and this he actually obtained, after six months' unremitting application. While in India, he devoted himself to the study of Oriental literature, but did not long survive the influence of the climate and his over-exertions in his studies. He died in 1806. His poetical Remains, with a Memoir of his Life, were published in 1821, and, in 1826, the Commentaries of Baber, translated by him from the Turkish language. An animated sketch of doctor Leyden's life is contained in the 4th volume (American edition) of the *Miscellaneous prose Works of sir W. Scott*.

LEYDEN PHIAL, in electricity, is a glass phial or jar, coated both within and without with tin-foil, or some other conducting substance, which may be charged, and employed in a variety of useful and entertaining experiments. Glass of any other shape, so coated and used, has also received the same denomination. A vacuum produced in such a jar, &c., has been named the *Leyden vacuum*. (See *Electricity*.)

LI (called also *caxa*); the common copper coin, in China, with a square hole in the middle, and an inscription on one side. The copper is alloyed with lead, and the coin, which is cast, is very brittle. 10 lis make one candareen, 100 a mas, 1000 a liang or tale, about \$1,50.

LIAS, in geology; the name of a peculiar formation, consisting of thick, argillaceous deposits, which constitutes the base on which the oölitic series reposes. The word *lias* is of English origin, and is said to be derived from a provincial pronunciation of the word *layers*. The upper portion of these deposits, including about two thirds of their total depth, consists of beds of a deep-blue marle, containing only a few irregular limestone beds. In the lower portion, the limestone beds increase in frequency, and assume the peculiar aspect which characterizes the *lias*, presenting a series of thin, stony beds, separated

by narrow, argillaceous partings; so that the quarries of this rock, at a distance, assume a striped and riband-like appearance. These limestone beds, when purest, contain 90 per cent. of carbonate of lime; the residue consisting, apparently, of alumine, iron and silix. In places where these beds are less pure, alumine of course abounds. The blue lias, which contains much iron, affords a strong lime, distinguished by its property of setting under water. The white lias takes a polish, and may be used for the purposes of lithography. The lias clay often occurs in the form of soft slate or shale, which divides into very thin *laminae*, and is frequently much impregnated with bitumen and iron pyrites; in consequence of which, when laid in heaps with fagots, and once ignited, it will continue to burn slowly until the iron pyrites is wholly decomposed. When it falls in large masses from the cliffs upon the sea-shore, as it often does in England, and becomes moistened by sea-water, it ignites spontaneously. The alun-slate of Whitby, in England, is of this sort. Lias clay is impregnated with a large dose of common salt, and sulphate of magnesia and soda; in consequence of which, springs of water, rising through it, contain these salts in solution. The Cheltenham and Gloucester springs are in this clay. The lias is remarkable for the number and variety of its organic remains, among which are numerous chambered univalves, bivalves, certain species of fish and vertebral animals, allied to the order of lizards, some of which are of enormous size. The ichthyosaurus, one of these, has the orbit of its eye 10 inches long and 7 broad; and the plesiosaurus, of which 5 species have been found, measures 20 feet in length. This rock also embraces, in some instances, bones of the turtle, fossil wood and jet. The lias crosses England from near Whitby, in Yorkshire, to Lyme, in Dorsetshire. The same formation occurs also in France, and in the Alps and the Jura. The most valuable mineral substances obtained from it are water-setting lime and alum shale.

LIBANUS, MOUNT. (See *Lebanon*.)

LIBATION (Latin, *libatio*, *libamentum*, from *libare*, to pour out); properly, a drink offering; but used also for other offerings to the gods, as a meal-cake, or something similar, placed on the altar, and a part of which was burned. Libations were also made at domestic meals, some of the food being thrown into the fire on the hearth, in honor of the *lares*. Of all fruits, a small portion was likewise placed

on an altar, table, &c., in honor of the gods, or thrown into the sea, in honor of the sea deities. The libations to the dead were not performed till the ninth day after the burning or interment, and consisted of milk, wine, or blood, and generally concluded the funeral solemnities. In sacrifices, the priest was first obliged to taste the wine with which he sprinkled the victims, and cause those to do the same who offered the sacrifice. This ceremony was called *libare* (*delibare*), whence it also means to touch or taste something. Among the Greeks, the *σπονδή*, or *δοίβη*, was similar to the *libatio* of the Romans.

LIBEL, in law, is defined to be the malicious defamation of any person, made public either by writing, printing or pictures, in order to provoke him to anger, or to expose him to public hatred, contempt or ridicule. When defamatory words are merely spoken in conversation, they exist no longer than during the act of giving them utterance, and are heard only by those in whose presence they are used; but, when they are committed to paper, they become permanent in their nature, and are capable of being disseminated far and wide. Words, again, may be spoken in haste, and without thought; but the act of writing necessarily requires time and deliberation. For these reasons, libelling is regarded, by our law, as a more heinous offence than slandering, which is the technical name for spoken defamation; and numberless expressions are libellous, if written and made public, which are not punishable, if they are merely spoken. Thus, unless the slanderous words be such as tend to cause it to be believed, that the person slandered is guilty of some crime punishable by law, as theft or perjury, or that he is infected with some disease which renders him unfit to mix in society; or unless they tend to injure him in the particular trade from which he derives his livelihood; or unless they have actually been productive of some damage to him, they are not actionable, though false. For instance, it is not legal slander to say of a private gentleman, that he is a swindler, if he has received no specific damage therefrom, beyond the mere annoyance of having been subjected to such an imputation. But such accusations as these, and all others which hold up individuals to public hatred, contempt or ridicule, become libellous when the remembrance of them is deliberately perpetuated by their being committed to writing. Libellers may be brought to punishment by a prosecution on the part of the government, or

be compelled to make reparation by a civil action. The civil action is grounded upon the injury which the libel is supposed to occasion to the individual; the public prosecution upon its tendency to provoke a breach of the peace. If the charges contained in the libel are true, a civil action cannot be maintained, because it is considered that every man must bear the consequences of his own act; and, therefore, if he has laid himself open to accusation, he must endure it as the natural result of his own crimes or folly. But, inasmuch as the malicious propagation even of that which is true, is calculated to disturb the public peace, the truth of the libellous matter is no defence, by the common law, upon a prosecution by the government, although, without doubt, it will, in many cases, entitle the defendant to the merciful consideration of the court, when it decides upon the *quantum* of punishment to be awarded.* In civil actions, again, it is necessary to prove that the publication of the libel was made to others besides the person at whom it is aimed; for, however false and atrocious it may be, it is evident that the person libelled can derive no injury from it, so long as its very existence is known to none but himself. Therefore an abusive letter, written by one man to another, is not sufficiently published to support an action, unless the writer shows it to a third person, because the person to whom it is addressed cannot be injured by it, unless he himself chooses to make it public; nevertheless, the author of such a letter may be prosecuted by indictment, for it equally tends to create a breach of the peace. With these distinctions, civil actions and prosecutions for libel stand very much on the same footing. In ordinary cases, it is not necessary to prove malice on the part of the libeller; for, even supposing that the libel was published without any malicious design, yet the injury to the individual, and the danger to the public peace, are not the less on that account. But, although the charges contained in a libel are false, yet, under the particular circumstances of certain cases, the author is excused, unless express proof can be produced of his having been influenced by hatred or malice. These are called *privileged* communications. The master who gives a bad character of the servant who has left him, is privileged, if he acts *bona fide*, and not

officially; but if, without application being made to him to give a character, he volunteers officiously to send one to the person who is about to hire the servant, he is not privileged, and must stand or fall with the truth or falsehood of his charges. So, if a father writes to his son, *bona fide*, warning him against a person whose character he has reason to suspect, that is a privileged communication. It is difficult to lay down any general definition, which shall comprise all the occasions when communications are privileged; but, perhaps, we shall not be very wrong in saying that, whenever a communication is made *bona fide*, unofficially, and without malice, and either the person who makes it, or the person to whom it is made, has a real substantial interest in the subject to which it relates, it is a privileged communication, and the mere fact of its not being true will not render the person who makes it liable, either to a civil action, or to a criminal prosecution. A fair criticism on a public work, or print, &c.; a fair comment on a place of public entertainment; a fair and impartial account of the proceedings in a court of justice, and the like, are not considered libellous, unless the subjects to which they relate are in themselves of such an obscene, blasphemous or scandalous nature, that a due regard to decency enjoins that they should not be publicly discussed, under which circumstances, even a correct statement becomes indictable. In a civil action, the plaintiff recovers damages, the amount of which is settled by the jury. But, upon an indictment, the jury has merely to acquit the defendant, or to find him guilty, after which the court passes judgment, and awards the punishment, which is generally fine and imprisonment, or both; but, by statute 1 George IV, c. 8, persons convicted a second time of a blasphemous or seditious libel, may be banished for such a term of years as the court thinks fit. The jury decide on the legal innocence or criminality of the alleged libel, without being bound by the direction of the judge. (See *Jury*.)—*Libel*, in the ecclesiastical and admiralty courts, is the name given to the formal written statement of the complainant's ground of complaint against the defendant.

LIBER; a surname of Bacchus among the Romans, referring to the idea of a deliverer, or liberator. Liber was originally an old Italian god of fertility, whose name was probably derived from the old word *libare* (to pour out, to water). He was

* By statute, in New York and Massachusetts, the truth may be a justification, if the publication was made with good motives and for justifiable ends.

worshipped in connexion with *Libera* (*Proserpine*) and *Ceres*.

LIBERAL. In the article *Arts*, the name of *liberal arts* is said to have been given, originally, to those which were considered suitable for freemen, in contradistinction to those which were left to slaves. In modern times, the word *liberal* has received a peculiar political meaning. The two great parties throughout the European continent, are composed of those who adhere to the ancient *régime*, and object to the principles of equal rights, and of those who, adhering to the latter, are thence called *liberals*. The struggle is between the feudal, or aristocratic, and the democratic principle. There exists, of course, a great variety of shades in both parties. The word *liberal* received the most distinct signification, in a political point of view, in France, during the years preceding the revolution of 1830. It then meant the party opposed to the ultras and the hierarchists. At present, the name has no longer a distinct party meaning in France, because the liberal party rule. But this party is divided into the party *du mouvement*, or those who wish further changes, and the *stabilitarians*, who wish to keep things as they are. The latter, at this moment, hold the reins of government. (See the articles *Doctrinaires*, *Centre*, and *Côté Droit*.)

LIBERAL ARTS. (See *Arts*.)

LIBERIA; the name which, in 1824, on the motion of general Robert Goodloe Harper, was given to the territory purchased by the American colonization society, on the western coast of Africa. The origin and purposes of this association have been already described in the article *Colonization Society*, as well as the ill success of the first attempt to establish a settlement, in 1820. In the summer of 1821, cape Montserado, or Mesurado, with a large tract of adjoining country, was purchased of the native chiefs, or head-men. The emigrants first established themselves on cape Montserado, under the direction of doctor Ayres, Jan. 7, 1822. Almost immediately after taking possession of the cape, doctor Ayres was, in consequence of severe illness, obliged to return to the U. States; but, happily for the colony, Mr. Jehudi Ashmun arrived, and assumed the superintendence of affairs, Aug. 8. For more than six years, this able man devoted all his powers to the work of establishing, upon broad and sure foundations, this colony, so interesting to the U. States, and so full of hope for Africa. His defence of the infant settlement, in

December, 1822, against the united forces of the natives, showed great courage and talent. During the visit of the present secretary* of the society to the colony, in 1824, the system of government now in operation was adopted, and the benefits which have resulted from it are great. The supreme power resides in the agent of the society, but all the civil and military officers of the colony are annually elected by the people. Through the negotiations of the late Mr. Ashmun, great accessions were made to the original territory of Liberia. Full possession has been obtained of large tracts of country, and a jurisdiction (which excludes all foreign nations from making settlements) acquired over the coast, from cape Mount to Trade Town, a distance of 150 miles. The territory of Liberia is generally low upon the coast, but gradually rises towards the interior, and, at a distance of from 20 to 30 miles from the sea, hills are visible, of considerable elevation. About 48 miles due north-west from cape Montserado, is Grand Cape mount, which is elevated from a level country, on a base of about four miles in diameter, 900 feet above the sea, which washes it on three sides. This mount, the north-western extremity of Liberia bay, is covered with a deep and unfading foliage. Several springs of excellent water descend from it, and the Pissou river (a broad, but irregular and sluggish stream, which has been traced to about 100 miles from its mouth) empties itself into the ocean on its northern side. The St. Paul's river, which flows into Liberia bay, at the distance of from eight to nine miles north of cape Montserado, is of considerable magnitude, and supposed to admit, above its falls (about 20 miles from its mouth), of boat navigation for 200 or 300 miles. The Montserado river is 40 miles long, and enters the sea on the northern side of the cape of the same name. In the Junk district, south-east of cape Montserado 40 miles, are two considerable rivers, one descending from the north-north-west, and the other from the east-north-east, and pouring their waters into the ocean at the distance of only two miles from each other. The river St. John's, 81 miles south-east from cape Montserado, is larger than any we have mentioned, and represented by Mr. Ashmun as majestic, and navigable for vessels of 90 to 100 tons, abounding with fish, and having its course through a fertile, delicious and salubrious country, of a rich and mellow soil, fanned 16 hours in every

* R. R. Gurley.

24, even in the dry season, by a sea breeze, tempered and sweetened, in its passage up the river, by the verdure which crowns its banks, rendering the scene one of the most delightful that can be imagined. Cape Montserado, upon which is situated Monrovia (so called in honor of president Monroe, one of the earliest and most efficient friends of the colonization society), the earliest settlement made in Liberia, is about 6° 27' N. lat., and 10° 40' W. lon. from Greenwich. Cape Montserado is elevated about 80 feet above the ocean, is washed by the water on three sides, and connected with a level tract of land on the fourth. Its length, from north-west to south-east, is three and one third miles; its average width, from north-east to south-west (directly across from the river to the ocean), three fourths of a mile. It comprehends about 1600 acres. From May to October, the wind, on this coast, is uniformly from south-south-west. In November and December, the sea breeze varies from south-south-west to north-north-west, the land breeze commonly from north-east and north. Masters of vessels should remember that this coast may, at all seasons, be descended with little difficulty; but that the ascent, between January and May, is exceedingly slow, both the current and wind being in opposition. Vessels standing by cape Mount ought to give this cape a birth of two or three leagues. The anchorage ground, at the distance of one or two miles north-east of cape Montserado, is safe and good. The American colonization society has transported to Liberia 1402 free persons of color. Between 100 and 200 slaves, liberated from the grasp of pirates on the coast, have been placed under the protection of the colony. About 300 slaves, taken while about to be brought into the U. States contrary to law, have been removed to Liberia by the government of the U. States. There are four flourishing settlements within the limits of the colony—Monrovia, Caldwell, the Half-way Farms (or New Georgia), and Millsburg, situated 20 miles in the interior, on the eastern bank of the St. Paul's. One of the native tribes has voluntarily placed itself under the laws of the colony, and others have expressed a desire to follow its example. The natives, in the vicinity of Liberia, may be divided into three great classes—the Fey or Vey tribes occupying the country from Gallinas river to Grand Cape mount, a distance of 50 miles, and which are estimated by Mr. Ashmun at 1500. Between cape Mount and cape Montserado is the

Dey tribe, about half the number of the Veyes. South-west of Montserado are the Bassas, extending over various countries. Their number may be estimated at 150,000. The Veyes are described as a proud, selfish, deceitful race; the Deys as indolent, pacific and inoffensive, and the Bassas as industrious, and many of them laborious. It is not to be understood, however, that each of these classes is held together and directed by a single government. They are all of them broken up into small and feeble tribes, utterly incapable of conducting warlike operations in a united and powerful manner. The people farther in the interior are of a more elevated and civilized character, have some knowledge of the Arabic language, and some acquaintance with the more useful arts. The articles to be obtained by trade at Liberia are chiefly ivory, camwood, gold, tortoise-shell, hides, the teeth of the sea-horse, and a small quantity of coffee. The country abounds in cattle, goats, swine and fowls, and in most of the fruits and productions of other tropical climates. Thus far, the efforts of the American colonization society have been attended with great, if not unexampled, success. The men of color, who have migrated to Liberia, have felt the influences of enterprise and freedom, and are improved alike in their condition and character. Those who were slaves have become masters; those who were once dependent have become independent: once the objects of charity, they are now benefactors, and the very individuals who, a few years ago, felt their spirits depressed in our land, and incapable of high efforts and great achievements, now stand forth conscious of their dignity and power, sharing in all the privileges and honors of a respected, a free, and a Christian people. The plan of the American colonization society appears practicable to a very great extent, and, we trust, will be made the means of inestimable good to the U. States and to Africa.

LIBERTAS, among the Romans, personified liberty; according to Hyginus, a daughter of Jupiter and Juno. When she is represented on coins, with her head uncovered, she is the Roman Liberty; but, with a diadem and veil, she is the goddess Liberty, in general. Gracchus built a temple to the latter on mount Aventine.

LIBERTINES, or LIBERTINI; a sect of fanatics, in the sixteenth century, in Holland and Brabant, who placed religion in a perfect union of the soul with God, which having once taken place, all difference between evil and good, sin and vir-

ture, ceased; so that the individual might give himself up to his appetites and passions, as these were no longer bad.

LIBERTY OF THE PRESS. (See *Press*.)

LIBERTY TREE. At the time of the disturbances excited in the American colonies by the stamp act, a large American elm was used, in Boston, to hang obnoxious characters in effigy, and to make known the intentions of the *sons of liberty* (as the patriots were called), who also held their meetings under it. The following inscription was placed upon it—"This tree was planted in the year 1646, and pruned by order of the sons of liberty, February 14, 1766." It was thenceforward called the *liberty tree*, but, in 1774, was cut down by the English troops, by whom the town was occupied. The example was imitated in other parts of the country, most of the towns having their liberty tree; and, on the breaking out of the French revolution (1789), the same emblem was adopted. A liberty tree was planted by the Jacobins in Paris, and many other cities of France followed their example. The same ceremony was practised by the French troops, on their entrance into foreign countries. The Lombardy poplar was first used, but the French name of this tree (*peuplier*), affording matter of derision, oaks or fir-trees were afterwards used.

Liberty, Cap of. The right of covering the head was, in early times, a mark of liberty. Slaves always went bare-headed, and one of the ceremonies of emancipation was the placing a cap on their head, by their former master. Thus the cap (or the hat) became the symbol of liberty, and has played a part in many revolutions. The Swiss owe their liberty to the hat which Gessler ordered to be saluted as a mark of submission. The arms of the united Swiss cantons have a round hat for a crest. In England, the cap (blue, with a white border, and the inscription *Liberty*, in letters of gold), is used as a symbol of the constitutional liberty of the nation, and Britannia sometimes bears it on the point of her spear; more commonly, however, she has the trident of Neptune, without the cap, in her left hand, whilst she offers the olive branch of peace to the world in her right hand. The cap was used in France, as the symbol of liberty, at the beginning of the revolution (1789); and its red color was borrowed from that of the liberated galley-slaves of Marseilles, who went in great numbers to Paris. The Jacobin club, at Paris, afterwards made the red cap a badge of mem-

bership, and it was, therefore, afterwards called the *Jacobin cap*.

LIBRA; the Roman pound unit for weighing. (See *As*.) The ancient Romans reckoned money also by pounds, and a *libra* of silver was worth about thirteen dollars. This word passed over to the various nations of Latin descent or mixture. (See *Livre*.)

LIBRARIES. The most ancient library is fabulously ascribed to the Egyptian king Osymandyas of Memphis. Pisistratus first founded a library among the Greeks, at Athens; Xerxes carried it to Persia, but Seleucus Nicator caused it to be restored to Athens. The most celebrated library of antiquity was the Alexandrian. (See *Alexandria*.) Æmilius Paulus and Lucullus brought the first libraries, as the spoils of war, to Rome. Asinius Pollio founded the first public library, which was also taken in war. Julius Cæsar established a large library, and intrusted it to the care of the learned Varro. Augustus founded two libraries, one of which was called *Palatina*, because it was in the temple of Apollo, on mount Palatine; the other was in the portico of Octavia, and was called *Octaviana*. The conflagration of Nero destroyed several libraries, which Domitian restored. Trajan founded a very excellent library. Publius Victor mentions 28 public libraries in Rome; there were, besides, extensive private libraries. These treasures were destroyed or dispersed, partly by the ravages of the barbarians, partly by the iconoclasts. In the ninth and eleventh centuries, Basil the Macedonian, emperor of the East, and the learned Comnenian imperial family, made several collections of books, principally in the convents of the Ægean islands and mount Athos. The Arabians had, in Alexandria, a considerable library of Arabian books. Al-Mamoun collected many Greek manuscripts in Bagdad. In the West, libraries were founded in the second half of the eighth century, by the encouragement of Charlemagne. In France, one of the most celebrated was that in the abbey St. Germain des Prés, near Paris. In Germany, the libraries of Fulda, Corvey, and, in the eleventh century, that of Hirschau, were valuable. In Spain, in the twelfth century, the Moors had 70 public libraries, of which that of Cordova contained 250,000 volumes. In England and Italy, libraries were also founded with great zeal, particularly, in the former country, by Richard Aungerville; in the latter, by Petrarch, Boccaccio and others. After the inven-

tion of the art of printing, this was done more easily and at less expense. Nicholas V founded the Vatican library. Cardinal Bessarion bequeathed his excellent library to the church of St. Mark at Venice. (See Petit-Radel's interesting *Recherches sur les Bibliothèques anciennes et modernes jusqu'à la Fondation de la Bibliothèque Mazarine* (Paris, 1819.)) The principal libraries of modern times are, the royal library at Paris (more than 400,000 printed books and 80,000 MSS.); the central court library at Munich (more than 400,000 books and 9000 MSS.); the imperial library at Petersburg (300,000 books and 11,000 MSS.); the imperial library at Vienna (300,000 books and 12,000 MSS.); the university library at Göttingen (about 300,000 books); the royal library at Dresden (at least 220,000 printed books, 150,000 pamphlets, dissertations and small works not included, and 2700 MSS.); the royal library at Copenhagen (stated variously at 130,000, 250,000 and 400,000 volumes; it has 3000 MSS.); the library in the Escorial (130,000 volumes, and excellent Arabian MSS.); the royal library at Berlin (200,000 vols. and 7000 MSS.); the academical library at Prague (130,000 vols. and 8000 MSS.); the royal library in Stuttgart (116,000 vols.); the Vatican library at Rome (360,000 books and 40,000 MSS.). In England, the two largest libraries are the Bodleian in Oxford (stated by some at 500,000, by others at 250,000 vols. and 30,000 MSS.), and the library of the British museum at London (180,000 books and about 60,000 MSS.). Besides the *Bibliothèque du roi*, there are, in Paris, those of the arsenal (150,000 printed books, 5000 MSS.), of St. Geneviève (110,000 printed books, 2000 MSS.); of the institute (50,000 vols.); of the chamber of deputies (40,000); the Mazarin library (90,000); making in all, 1,200,000 volumes in the public libraries in Paris. In the rest of France, there are 273 public libraries, the principal of which are those of Lyons (containing together 600,000 vols.); Bordeaux (105,000); Aix (73,000), &c. The total number of volumes, in these provincial libraries, is 3,000,000. Access to these great collections is easily obtained, both by natives and foreigners. In Italy, there are a great number of valuable libraries, of which that at Bologna, founded in 1650, contains 150,000 vols., 9000 MSS.; the Magliabecchi library at Florence, 150,000 vols., 9000 MSS.; the university library at Genoa, 70,000 vols.; the Ambrosian at Milan, 60,000 printed vols., and, at least, 15,000 MSS.—according to others, 140,000 vols.

and 15,000 MSS.; that at Modena, 80,000 vols., and that of Naples 130,000. The Vatican library is very large and famous, but in much disorder. The number of books in foreign libraries is very difficult to be ascertained with precision, and the statements differ so much, that the above estimates are, in many cases, little better than approximations. In the U. States, the principal libraries are that of Harvard college (36,000 vols.); of the Boston Athenæum (26,000 vols.); of the Philadelphia library, (27,000 vols.); of congress (16,000 vols.); of Charleston (13,000.)

LIBRATION OF THE EARTH is sometimes used to denote the parallelism of the earth's axis in every part of its revolution round the sun.

Libration of the Moon. Very nearly the same face of the moon is always turned towards the earth, it being subject to only a small change within certain limits, those spots which lie near the edge appearing and disappearing by turns; this is called its *libration*. The moon turns about its axis in the same direction in which it revolves in its orbit. Now, the angular velocity about its axis is uniform, and it turns about its axis in the same time in which it makes a complete revolution in its orbit; if, therefore, the angular motion about the earth were also uniform, the same face of the moon would always be turned towards the earth; for, if the moon had no rotation on her axis, when she is on opposite sides of the earth, she would show different faces; but if, after she has made half a revolution in her orbit, she has also turned half round her axis, then the face, which would otherwise have been shown, will be turned behind, and the same face will appear; and thus, if the moon's angular velocity about her axis were always equal to her angular velocity in her orbit about the earth, the same side of the moon would be always towards the earth; but as the moon's angular velocity about her axis is uniform, and her angular velocity in her orbit is not uniform, these angular velocities cannot continue always equal, and therefore the moon will sometimes show a little more of her eastern parts, and sometimes a little more of her western parts. This is called a *libration in longitude*. Also the moon's axis is not perpendicular to the plane of her orbit, and, therefore, at opposite points of her orbit, her opposite poles are turned towards the earth; therefore her poles appear and disappear by turns. This is called a *libration in latitude*. Hence nearly one half of the moon is never visible

at the earth, and therefore nearly one half of its inhabitants (if it have any) never see the earth, and nearly the other half never lose sight of it. Also, the time of its rotation about its axis being a month, the length of the lunar days and nights will be about a fortnight each. It is a very extraordinary circumstance, that the time of the moon's revolution about her axis should be equal to that in her orbit.

LIBYA, with the ancient geographers; a large part of the north of Africa, west of Egypt, which was divided into Libya exterior and interior; sometimes also into L. Proper, L. Marnarica and L. Cyrenaic. The Greek authors sometimes comprehended all Africa under this name.

LICENSES, or FREE LETTERS, were instruments used to diminish the effect of the Berlin and Milan decrees of Napoleon, and the British orders in council, which threatened the destruction of European commerce, if some exceptions had not been made by both nations. England decreed first, in November, 1808, that vessels of all nations, the French excepted, might be provided with licenses, good for one year, upon condition of importing grain into England; but, after 1809, licenses were given under the condition of exporting British manufactures or colonial produce. Licenses were also sold by France, especially for the purpose of supplying her navy. False papers for ships were also in common use. At last, it was decided by England to grant licenses to all ships not French, even though they carried a French license, upon condition that one third part of the cargo should be English goods, the same portion of French cargo being also allowed. France also gave licenses (to American vessels) to export French goods, and, in return, to import colonial produce. Licenses were granted by Russia for trade with England, from 1811, and by Sweden, for the same trade, from 1812; but, at the fall of the famous continental system (see that article), the licenses became useless.

LICENTIATE; an academical dignity between the baccalaureate and the doctorate, and the obtaining of which is a necessary step to taking the doctor's degree. *Licentiate* also signifies the person who has received the degree. A licentiate in theology has the right of delivering theological lectures, and a licentiate in medicine the right to practise.

LICHENS; a family of plants, belonging to the Linnean class *cryptogamia*, containing about 1200 known species, which are now arranged under several genera. Their

substance is powdery, crustaceous, membranous, coriaceous, or even corneous; and their form that of a horizontal frond, sinuated, lobed, or divided, bearing scattered tubercles and cup-like warts, or branching and coralloid. They are common every where, adhering to rocks, the trunks of trees and barren soil. On ascending mountains, they are found flourishing beyond the limit of all other plants, even to the very verge of perpetual snow. Many of them, fixing upon the hardest rocks, by retaining moisture, facilitate their decomposition, and promote the formation of soil. They are generally perennial, and grow by receiving moisture through all parts of their surface, and, though frequently desiccated, the least rain restores their freshness. Many of the species appear to be universally distributed, occurring in all parts of the globe; but the lichens of the equatorial regions and southern hemisphere have not, hitherto, been satisfactorily examined. Several of the species are used for sustenance in times of scarcity, by the inhabitants of the northern regions. The *tripe de roche* of the Canadians, so often resorted to by the fur traders, is also a lichen, somewhat resembling the substance from which the name is derived. The reindeer moss (*cænomyce rangiferina*) is common, in sterile soil, in many parts of the northern hemisphere; but, in the arctic regions, it grows in the greatest profusion, often occupying, exclusively, extensive tracts of country, covering the ground to the depth of a foot or more, and having the appearance of snow. It is celebrated as being the chief resource of the reindeer in these desolate regions. The Iceland moss (*physcia Icelandica*) is also exceedingly abundant in the arctic regions, and often affords aliment to the inhabitants, either in the form of gruel or bread, which last, though not agreeable, is very nutritious. The taste is bitter, astringent, and extremely mucilaginous. It is an article of commerce, and is very frequently employed in pharmacy, in the composition of various pectoral lozenges and sirups, and is celebrated as an article of diet, in combination with milk, in coughs and pulmonary affections. The plant consists of a membranous frond, divided into lobes and *lacinae*, which are unattached, and either smooth or fringed on the margin. It is very abundant in the Alpine region of the White mountains of New Hampshire. Orchal (*rocella tinctoria*) is still an important article of commerce, though much less used now than formerly, on account

of the fugitiveness of the rich purple and rose-colored dyes which it yields. Some of its tints, however, are capable of being fixed, and it is, besides, employed for staining marble, forming blue veins and spots. It grows on rocks, bordering on the sea, in the islands of the Mediterranean, the Azores, Canaries, Cape Verde and Bourbon. That from the Canaries is most esteemed, and is largely imported into Europe. Several other lichens afford dyes of various colors, some of which can be rendered permanent. Litmus is also obtained from a lichen. (See *Litmus*.)

LICHTENBERG, George Christopher, one of the greatest natural philosophers, and wittiest writers, that Germany has produced, born in 1742, at Ober-Ramstädt, near Darmstadt, was the youngest of a family of 18 children. He received from his father some instruction in physics, and went, after his death, to the academy at Darmstadt. He was strong and well formed till eight years of age; but, at this time, the effects of the carelessness of his nurse became visible, in a distortion of the spine. In 1763, he went to Göttingen, where he applied himself to astronomical observations. He made observations upon the earthquake of 1767, and observed, with Kästner, the transit of Venus over the sun's disk, June 19, 1769, as also the comets of 1770, 1771, and 1773, the orbit of which last he described, and presented to the academy of sciences of Göttingen. He also constructed lunar charts, in which the spots are indicated in the order in which they are successively covered by the earth's shadow. In 1770, he was offered a professorship at Göttingen, which he entered upon in his 28th year. In this year he went to London. Lichtenberg ascertained by observation, in 1772 and 1773, the situations of Hanover, Osnabrück and Stade. He afterwards undertook to publish, with illustrations, the papers left by Tobias Mayer, and added a lunar chart, with a description of lunar spots; but only one volume appeared. He visited England again in 1774, and wrote upon Garrick and the English stage. He subsequently published an excellent commentary upon Hogarth's engravings. In 1778, he returned to Göttingen. From this period, he lectured upon experimental philosophy. His lectures were of great worth, and his apparatus was princely. He was ranked as a discoverer in physics, from his observations upon the figures developed upon electrified substances, which he learned to reproduce and exhibit, and which still retain his name. He

also attacked, with much wit, in several publications, the system of physiognomy to which Lavater had given such currency; but he was subsequently reconciled to Lavater. Other productions, which he thought censurable, felt the lash of his wit. His taste for drawings illustrative of character, made him a great admirer of Hogarth. He, for a long time, supplied the Göttingen Souvenir with miniature drawings of the heads of Hogarth, accompanied by very witty and ingenious observations. The favorable reception of these led to the publication of a Minute Explanation of Hogarth's Plates, with perfect miniature Copies of them, by Riepenhausen, of which he published four numbers himself: the seven next to the eleventh were published by Böttiger, and the last by Bouterwek. In the last years of his life, Lichtenberg became hypochondriac and misanthropic, so that he shut himself up in his chamber, and would see no one. He died of a pulmonary inflammation, Feb. 24, 1799, aged 57. He was an original thinker, to whom no subject of a scientific character was uninteresting. Scientific spirit and poetic talent were united in him in a singular degree, and produced the most peculiar and striking results; but the highest principle of the human mind—faith in something divine—was, in his speculative moments, disregarded; and a superstitious belief in dreams, predictions and presentiments, was admitted in its stead.

LICHFIELD; an ancient city of England, in the county of Stafford, and a county of itself, with particular local jurisdiction, under the government of the bailiffs and magistrates. It stands on a small brook that runs into the Trent. The city is neat and well built, and consists of three or four principal streets, and some smaller ones; and is separated from the Close, which is in the county of Stafford, by a pool of running water. It is the residence of the dignitaries of the church. The cathedral is supposed to have been founded about 656, and was afterwards much enlarged and improved. It is one of the most elegant religious edifices in Great Britain, extending 400 feet in length, and 67 in breadth. In the centre rises an elegant steeple, to the height of 258 feet, and two smaller ones, at the west end, 183 feet. The interior is finished with corresponding elegance and splendor. The body of the church is spacious and lofty, supported by pillars formed of clusters of slender columns, with neat foliated capi-

tais. It extends 213 feet in length, from the great west door to the choir, and 153 in breadth: the breadth of the side-aisles is 66 feet, and the height of the nave 60. Over the great west doors, that open into the nave, is placed a splendid circular window, constructed at the expense of James, duke of York, in the reign of Charles II. A number of interesting monuments are dispersed through the church, among them Chantrey's celebrated group of sleeping children. St. Mary's chapel, now thrown open to the choir, is uncommonly beautiful and splendid. Besides the cathedral, the Close contains a variety of buildings, which, except a few houses, belong to the church. The bishop's palace is situated at the north-east corner. It is a spacious building of stone, with the date of 1687, and the arms of the bishopric, in front. Lichfield contains a free grammar school, at which were educated Addison, Wollaston, Ashmole, Garrick and Johnson. Population, 5022. 16 miles N. Birmingham.

LICHTENSTEIN, Martin Henry Charles; a linguist and natural philosopher, born at Hamburg, Jan. 10, 1780. At the age of 22, he received from the Dutch general Janssen, who was appointed governor of the cape of Good Hope, the situation of instructor and physician to his son. He arrived at the cape at the end of the year 1802, and spent seven months in exploring the interior of the colony. Upon the breaking out of the war, he received, in 1804, the post of surgeon-major to a battalion of Hottentot light infantry, and, after a few expeditions, was named, in 1805, as one of a commission to visit the distant tribe of Bushwanas. Two months after his return, the colony was conquered by the English, and he returned to Europe with general Janssen, and to Germany in 1806. In 1810, he went to Berlin, and published there his *Journal*, of which the two first volumes appeared in 1811. In 1811, he also became a professor in the newly erected university. In 1819, he travelled through England, Holland, Switzerland and France; studied their most celebrated scientific institutions for natural history, and formed connexions which enabled him to augment, greatly, the museum of the university with which he was connected.

LICHTENSTEIN (properly, *Liechtenstein*), a sovereign principality, the smallest state of the German confederacy, is situated on the northern declivity of the Rhætian Alps (which here rise to the height of 5600 feet), and on the Rhine. It com-

prises an area of 53 square miles, with 5800 inhabitants, in 11 villages. Vadutz, a market-town, is the chief place. The prince has declared the Austrian code valid in Lichtenstein. The courts of appeal are the Austrian courts. The prince furnishes a contingent of 55 men to the army of the confederacy. He has a voice in the 16th vote in the diet, and has the 28th vote in the general assembly (*plenum*). Nov. 9, 1818, he granted his principality a constitution, on the model of the constitution of the German states of Austria. We mention this, on account of the qualifying clauses of the fourth section of this instrument, which would make the electors of Lichtenstein an assembly of patriarchs. It gives the right of voting to every person who pays taxes on an estate valued at 2000 guilders, is 30 years old, of irreproachable and disinterested character, and of a peaceable disposition. The prince's income is 17,000 guilders, but he has large districts, with towns and villages, as an Austrian subject, which contain 350,000 inhabitants, and yield a revenue of 1,500,000 guilders. He has also considerable possessions in Bohemia.

LICK, or SALT LICK. A salt spring is called a *lick*, in the western parts of the U. States, from the circumstance that the earth about it, which is impregnated with saline particles, is licked by the bison and deer.

LICTORS. Lictors, in Rome, were the public servants, who attended upon the magistrates, to fulfil their commands. Their name (*lictiores*) was derived from their binding offenders hand and foot, previously to the punishment of scourging. The office was borrowed by Romulus from the Etruscans, whose chief magistrates were attended by servants, bearing axes tied up in bundles of rods, which were called *fasces*. He was himself always preceded by 12 of them. When the regal dignity was abolished at Rome, the royal pomp was retained; and, on this account, consuls, prætors, and other important officers (except the censors), were all attended by lictors. When a magistrate of high rank appeared in public, the lictors preceded him in a file, following each other. It was their duty to clear the road of the populace, that the consul, or other officer, might not be impeded in his progress; and this was effected by the cry, "The consul (or prætor, &c.) comes," "Make way for the consul." When he returned to his own house, or entered another, the lictors struck the door with their fasces. They

also took care that proper respect should be shown to the person of the magistrate. A horseman who met the consul was obliged to dismount. Every one uncovered his head as he passed, left him free passage, &c. The lictors were the executioners of punishments. They were free men, but chosen from among the lowest classes, and were often freed-men of the magistrate whom they attended. The dictators were preceded by 24 lictors; the consuls, decemvirs and tribunes of the soldiers, by 12; the prætors and master of the horse, by 6, and the vestal virgins by 1, only.

LIECHTENSTEIN. (See *Lichtenstein*.)

LIEGE (German, *Lüttich*; Dutch, *Luyk*), formerly a bishopric in the circle of Westphalia, was occupied by the French in 1794, ceded to them by the peace of Lunéville, and formed the department of the Ourthe. By a decree of the congress of Vienna, and a separate treaty of March 23, 1815, this country was given, as a sovereign principality, to the king of the Netherlands, and formed, until the Belgian revolution of 1830, a province of the kingdom, containing 2160 square miles, with 354,000 inhabitants, some portions of its territory having been added to other provinces. The Meuse and Ourthe water it. In the southern part, which is a continuation of the Ardennes, the soil is rocky, hilly, and covered with woods. The western part is a fertile plain. Grain is not raised in quantities sufficient to supply the wants of the inhabitants, and has been partly superseded by potatoes. Cattle and sheep are raised in great numbers. The Limburg cheeses, which are made in this province, are celebrated. It is rich in coal, calamine, alum, iron, lime, good marble, flints, whetstone and building-stone. The cloth and iron manufactories are considerable, and guns and cloths are exported in large quantities. The new troops of Turkey have been chiefly armed from the workshops of Liege.—*Liege*, the capital of the province, lies in a valley on the Meuse, at its confluence with the Ourthe. Liege was formerly fortified. There are 17 bridges across the river. The population is 47,000; houses, 8000. There are 40 churches in the city. Lat. 50° 39' 22" N.; lon. 5° 31' 50" E. The inhabitants are chiefly Walloons, who speak a corrupt French, mixed with Spanish and German. Muskets are made from the value of a crown to 500 louis d'or. There are also cannon-foundries, zinc-works, tanneries, &c. Nails are manufactured here in great quantity. A university was established at Liege (1817), which, previous

to the troubles of 1830, had 350 students and several useful institutions connected with it.

LIEGNITZ, capital of the government of the same name, in Silesia, Prussia, at the confluence of the Schwarzwasser and Katzbach, the seat of government, &c., has 9600 inhabitants, institutions for education, linen-bleacheries, &c. Frederic the Great defeated general Laudon near Liegnitz, August 15, 1760. Not far from it lies the village of Wahlstatt, from which Blücher received his title of *prince*, on account of the battle of the Katzbach (q. v.). The former principality of Liegnitz had dukes of the Piast family. The second wife of the king of Prussia, to whom he was united by what is called a *left-handed*, or *morganatic* marriage (see *Morganatic Marriage*), Nov. 11, 1824, bears the title of *princess of Liegnitz*. She was a countess von Harrach. May 26, 1826, she joined the Protestant church, having previously been a Catholic.

LIEN, in law, in its most usual acceptation, signifies "the right which one person, in certain cases, possesses of detaining property, placed in his possession, belonging to another, until some demand, which the former has, is satisfied." It is, however, not unfrequently used, whenever property, either real or personal, is charged with the payment of any debt or duty, every such charge being styled a *lien on the property*, although the latter be not in the possession of the person to whom the debt or duty is due. This second signification would open too wide a field of discussion. We shall therefore confine ourselves to the explanation of the right of detaining, which is the more technical meaning of the two. Liens are of two kinds: 1. *particular liens*, that is, where the person in possession of goods may detain them until a claim, which accrues to him from those identical goods, is satisfied; and, 2. *general liens*, that is, where the person in possession may detain the goods, not only for his claim accruing from them, but also for the general balance of his account with the owners. Again, some liens are given by the common law, without any agreement between the parties; some are created by express agreement, and some by usage; which latter, indeed, implies an agreement, because, when a man enters into any business, where a particular usage is generally adopted, he is presumed to consent to be bound by that usage, unless, in his dealings with others, he expressly protests against it.—I. The common law gives a lien to the person in

possession of goods in three instances: 1. When the common law compels the members of any particular trade or business, without any option on their part, to accept employment from every person who is willing to pay a reasonable compensation, in recompense for the burden which it thus throws upon them, it allows them to detain such goods as are delivered to them in the course of their business, until the owner has satisfied any debt which may have arisen out of the transaction in which the goods were so delivered. Innkeepers, common carriers and farriers are entitled to this species of lien; for instance, the proprietor of a coach need not give up a parcel until the carriage of it be paid for. 2. When goods are delivered to a tradesman, or any other, to expend his labor upon, he is entitled to detain those goods until he is remunerated for the labor which he so expends. Thus a tailor is not obliged to take a customer's cloth and make it into a coat, but, if he consents to make the coat, the customer cannot compel him to deliver it until he is paid for the making. The first kind seems to be included in the second, but they are kept distinct, because it is supposed that the first was, at one time, the only species of lien allowed by the common law, and that the second was a subsequent invention, adopted on equitable considerations in limitation of it. 3. When goods have been saved from the perils of the sea, the salvor may detain them until his claim for salvage is satisfied; but the finder of goods has in no other case a lien on the goods found, in respect of the trouble and expense to which the finding and preserving of them may have subjected him. All these are particular liens; and, therefore, the coach proprietor may not detain the parcel, nor may the tailor detain the coat, nor the salvor the property saved, until payment of the carriage of a former parcel, or of the price of another coat, or of salvage which accrued for saving other goods. Another rule with regard to particular liens is, that they exist only so long as the possession of the goods is retained by the person who has the lien. If he once deliver up the goods to the owner, he waves his lien, which is thereby so effectually annihilated, that it will not be revived, even if the same goods should afterwards return into his possession. Thus, if the tailor deliver the coat, and it is afterwards sent to him to be mended, he cannot then detain it as a security for the original price, but only for the cost of mending. His remedy to re-

cover the price must be by a suit at law; and we may here remark, that a creditor can never prejudice his right of maintaining an action for his demand, by insisting on his right of detaining the goods, for the action and the lien are concurrent rights, and do not interfere with each other. —II. *General liens* are only created by express agreement, or by usage. It has been determined, that attorneys and solicitors, bankers, factors and brokers, insurance-brokers, and some others, are, by the custom of their respective trades and professions, entitled to a lien on the property of their clients, customers and employers, for the general balance of their accounts. Thus an attorney may detain papers which have been delivered to him to assist in the conducting of one cause, as a security for the costs of another; and, if he return them to his client, and they come again into his possession, his lien revives; for, in the case of a general lien, it matters not whether the same or different papers are delivered to the person employed, his right of detaining being the same in both instances.

LIEOU-KIEOU. (See *Loo-Choo*.)

LIEUTENANT. This word, like *captain* (q. v.), and many others, has received gradually a much narrower meaning than it had originally. Its true meaning is a *deputy*, a *substitute*, from the French *lieu* (place, post) and *tenant* (holder). A *lieutenant général du royaume* is a person invested with almost all the powers of the sovereign. Such was the count d'Artois (afterwards Charles X) before Louis XVIII entered France, in 1814. The duke of Orleans, before he accepted the crown as Louis-Philip, was appointed to the same office by the chamber of deputies. *Lieutenant-general* was formerly the title of a commanding general, but at present it signifies the degree above major-general. *Lieutenant-colonel* is the officer between the colonel and major. *Lieutenant*, in military language, signifies the officer next below a captain. There are first lieutenants, and second, or *sous-lieutenants*, with different pay. A lieutenant in the navy is the second officer next in command to the captain of a ship. According to the new organization of the French navy, of 1831, there are *lieutenants de vaisseau* and *lieutenants de frégate*, formerly called *enseignes de vaisseau*. The latter can command only in the absence of the former. In England, the *lord-lieutenant* of a county has the authority to call out the militia in case of invasion or rebellion. The governor of Ireland is also called *lord-lieuten-*

ant of Ireland. In some English colonies, jointly under a *governor-general*, the chief magistrate of each separate colony is called *lieutenant-governor*. Many of the U. States choose lieutenant-governors to act in case of the governor's death, &c.

LIFE. (See *Physiology*.)

LIFE-PRESERVERS. The human body is a little lighter than an equal bulk of water, so that it naturally floats in this fluid. The mouth, however, in the case of most men lying motionless in the water, would sink below the surface, if the head were not thrown back by a muscular effort. Many persons who fall into still water, and are unable to swim, might be saved, if they had presence of mind sufficient to preserve a proper position. The specific levity of the body, in comparison with water, makes it easy to keep the upper part of it considerably elevated above the surface of the water by attaching to the chest some buoyant substance, even though its bulk be not great; and many contrivances, called *life-preservers*, have been invented with this view. A great portion of them, however, have been found, in practice, of little or no use. One of the latest is the invention of a Mr. Scheffer, in England. It consists of a hollow cylinder, formed without a seam, and perfectly air-tight, bent when distended with air and ready for use: or it is what may be termed a *cylindrical ring*, without a seam, and without a break. Of this ring, the external diameter is generally about 22½ inches, the internal diameter about 12, and the diameter of the cylinder about 5½, the dimensions varying, of course, by being specially adapted to the size of the person by whom it is designed to be employed. It contains a small stop-cock, to which an ivory pipe is fixed. Through this pipe the air is injected by the mouth, and retained by the stop-cock; the adjustment and inflation only occupying the short space of one minute. When unexpanded, it folds up into a very small compass, so as to be conveyed in the pocket; and is also very portable, its weight being but twelve ounces. Another life-preserver, invented in the U. States, by a gentleman of Connecticut, does not differ essentially from this, except that it is a straight cylinder. It is made of cloth without a seam, and rendered impervious to water by a preparation of caoutchouc, is about two feet, or two and a half feet long, and eight or ten inches in diameter; is filled like the one first described, and secured to the body by means of straps passing over the shoulders. When empty,

it occupies but little room, and may even be worn by a man laboring on the deck of a vessel in danger. He can inflate it in a few moments, when he finds it necessary to trust himself to the waves.

LIGAMENT, in anatomy; a strong, compact substance, serving to join two bones together. A ligament is more flexible than a cartilage, not easily ruptured or torn, and does not yield, or at least yields very little, when pulled.

LIGATURE, in surgery, is a cord, band, or string; or the binding any part of the body with a cord, band, fillet, &c., whether of leather, linen, or any other matter. Ligatures are used to extend or replace bones that are broken or dislocated; to tie the patients down in lithotomy and amputations; to tie upon the veins in phlebotomy, on the arteries in amputations, or in large wounds; to secure the splints that are applied to fractures; to tie up the processes of the *peritoneum*, with the spermatic vessels, in castration; and, lastly, in taking off warts or other excrescences by ligature. *Ligature* is also used to signify a kind of bandage or fillet, tied round the neck, arm, leg, or other part of the bodies of men or beasts, to divert or drive off some disease, accident, &c.

LIGATURES, among printers, are types consisting of two letters or characters joined together; as *ff*, *fi*, *fl*. The old editions of Greek authors are extremely full of ligatures; the ligatures of Stephens are by much the most beautiful.

LIGHT is that which renders objects perceptible to our sense of seeing. It is one of the most interesting subjects that fall under the contemplation of the philosopher: at the same time it must be acknowledged to be one that is as little understood, and upon which opinions are as much divided, as any of the most abstruse subjects of philosophical inquiry. Some consider light as a fluid *per se*; while others consider it merely as a principle, and attribute to it a sort of pression, or vibration propagated from the luminous body through a subtile, ethereal medium. The ancients believed it to be propagated from the sun and other luminous bodies instantaneously; but the observations of the moderns have shown that this was an erroneous hypothesis, and that light, like any other projectile, employs a certain time in passing from one part of space to another, though the velocity of its motion is truly astonishing, as has been manifested in various ways. And first, from the eclipses of Jupiter's satellites; it was observed by Rømer, that the eclipses of

those satellites happen sometimes sooner and sometimes later than the times given by the tables of them, and that the observation was before or after the computed times, according as the earth was nearer to or farther from Jupiter than the mean distance. Hence it was concluded that this circumstance depended on the distance of Jupiter from the earth; and that, to account for it, we must suppose that the light is 14 minutes in crossing the earth's orbit. The original observations have received some corrections, and it is now found that, when the earth is exactly between Jupiter and the sun, his satellites are seen eclipsed about eight minutes and a quarter sooner than they could be according to the tables; but when the earth is nearly in the opposite point of its orbit, these eclipses happen about eight minutes and a quarter later than the tables predict them. Hence, then, it is certain that the motion of light is not instantaneous, but that it takes up about $16\frac{1}{2}$ minutes of time to pass over a space equal to the diameter of the earth's orbit, which is nearly 190,000,000 of miles in length, or at the rate of 200,000 miles per second—a conclusion which, it may be added, is placed beyond doubt, by the aberration of the stars discovered by the celebrated doctor Bradley. Upon the subject of the materiality of light, doctor Franklin observes, in expressing his dissent from the doctrine that light consists of particles of matter continually driven off from the sun's surface, with such enormous swiftness—"Must not the smallest portion conceivable have, with such a motion, a force exceeding that of a 24 pounder discharged from a cannon? Must not the sun diminish exceedingly by such a waste of matter, and the planets, instead of drawing nearer to him, as some have feared, recede to greater distances, through the lessened attraction? Yet these particles, with this amazing motion, will not drive before them or remove the least and slightest dust they meet with, and the sun appears to continue of his ancient dimensions, and his attendants move in their ancient orbits." He therefore conjectures that all the phenomena of light may be more properly solved, by supposing all space filled with a subtle elastic fluid, not visible when at rest, but which, by its vibrations, affects that fine sense in the eye, as those of the air affect the grosser organs of the ear; and even that different degrees of vibration of this medium may cause the appearances of different colors. And the celebrated Euler has maintained

the same hypothesis, urging some further objections to the materiality of light, besides those of doctor Franklin above alluded to. Newton first discovered that certain bodies exercise on light a peculiar attractive force. When a ray passes obliquely from air into any transparent liquid or solid surface, it undergoes, at its entrance, an angular flexure, which is called *refraction*. The variation of this departure from the rectilinear path for any particular substance, depends on the obliquity of the ray to the refracting surface; so that the sine of the angle of refraction is to that of the angle of incidence in a constant ratio. Newton, having found that unctuous or inflammable bodies occasioned a greater deviation in the luminous rays than their attractive mass, or density, gave reason to expect, conjectured, that both the diamond and water contained combustible matter—a conjecture which was verified by subsequent discovery. Doctor Wollaston invented a very ingenious apparatus, in which, by means of a rectangular prism of flint glass, the index of refraction of each substance is read off at once by a vernier, the three sides of a movable triangle performing the operations of reduction in a very compendious manner. (*Phil. Trans.*, 1802.) But transparent media occasion not merely a certain flexure of the white sunbeam, called the *mean refraction*: they likewise decompose it into its constituent colors. This effect is called *dispersion*. Now, the mean refractive and dispersive powers of bodies are not proportional to each other. In some refracting media, the mean angle of refraction is smaller, whilst the angle of dispersion is larger. From the refractive power of bodies, we may, in many cases, infer their chemical constitution. For discovering the purity of essential oils, an examination with doctor Wollaston's instrument is of great utility, on account of the smallness of the quantity requisite for trial. This idea of doctor Wollaston has been happily prosecuted by M. Biot with regard to gaseous compounds; and we now have accurate tables of the refractive power of all transparent gaseous, liquid and solid bodies. Carburet of sulphur exceeds all fluid substances in refractive power, surpassing even flint glass, topaz and tourmalin; and in dispersive power, it exceeds every fluid substance except oil of cassia. Rays of light, in traversing the greater number of crystallized bodies, are commonly split into two pencils; one of which, called the *ordinary ray*, follows the common laws of refraction, agreeably to the tables alluded

to, whilst the other, called the *extraordinary ray*, obeys very different laws. This phenomenon is produced in all transparent crystals, whose primitive form is neither a cube nor a regular octahedron. The division of the beam is greater or less, according to the nature of the crystal, and the direction in which it is cut; but, of all known substances, that which produces this phenomenon in the most striking manner, is the crystallized carbonate of lime, called *Iceland spar*. If the white sunbeam, admitted through a small hole of a window-shutter into a darkened room, be made to pass through a triangular prism of glass, it will be divided into a number of splendid colors, which may be thrown upon a sheet of paper. Newton ascertained that if this colored image, or *spectrum*, as it is called, be divided into 360 parts, the red will occupy 45, the orange 27, the yellow 48, the green 60, the blue 60, the indigo 40, and the violet 80. The red rays, being least bent by the prism from the direction of the white beam, are said to be least refracted, or the least refrangible, while the violet rays, being always at the other extremity of the spectrum, are called the most refrangible. If these differently colored rays of light be now concentrated on one spot, by a lens, they will reproduce colorless light. Newton ascribes the different colors of bodies to their power of absorbing all the primitive colors, except the peculiar one which they reflect, and of which color they therefore appear to our eye. The different colored rays possess very different powers of illumination. The lightest green, or deepest yellow, which are near the centre, throw more light on a printed page than any of the rays towards either side of the spectrum. The rays of the prismatic spectrum differ from one another also in their heating power, as was first noticed by Herschel. In viewing the sun, by means of large telescopes, through differently colored darkening glasses, he sometimes experienced a strong heat, attended with very little light, and, at other times, he had a strong light with a little heat. This observation led to his well known researches upon this subject, from which he concluded that the maximum heat is just without the spectrum, beyond the red ray. Others have found the greatest heat in the red ray itself; but the recent observations of M. Seebeck have shown that the point of greatest heat was variable, according to the kind of prism which was employed for refracting the rays. When a prism of fine flint glass is used, the greatest heat is constantly

beyond the red; when a prism of crown glass, the greatest heat is in the red itself. It has long been known, that the solar light is capable of producing powerful chemical changes. One of the most striking instances of it is its power of darkening the white chloride of silver—an effect which takes place slowly in the diffused light of day, but in the course of two or three minutes by exposure to the sunbeam. This effect was formerly attributed to the influence of the luminous rays; but it appears, from the observations of Ritter and Wollaston, that it is owing to the presence of certain rays, that excite neither heat nor light, and which, from their peculiar agency, are termed *chemical rays*. It is found that the greatest chemical action is excited just beyond the violet ray of the prismatic spectrum, and that the spot next in energy is occupied by the violet ray itself, and that the property gradually diminishes as we advance to the green, beyond which it seems wholly wanting. The sunbeams, in traversing a colored glass, produce similar effects to those caused by the differently colored portions of the spectrum. Thus the chloride of silver acquires a black tint behind a blue or violet glass, but does not blacken behind a red or orange glass; on the other hand, it becomes red behind a red glass, and that much more quickly than even in the solar spectrum. Light produced by coal and oil gases, or by olefiant gas, even when concentrated so as to produce a sensible degree of heat, was found, by Mr. Brande, to occasion no change in the color of muriate of silver, nor in mixtures of chlorine and hydrogen; while the light emitted by electrized charcoal speedily affected the muriate, and caused these gases to unite, and sometimes with explosion. The concentrated light of the moon, like that of the gases, produced no change. The importance of light to plants is well known: deprived of it, they become white, and contain an excess of saccharine and aqueous particles; and flowers owe the variety and intensity of their hues to the influence of the solar beams. Even animals require the presence of the rays of the sun, and their colors seem materially to depend upon the chemical influence of these rays. A comparison between the polar and tropical animals, and between the parts of their bodies exposed, and those not exposed to light, shows the correctness of this opinion. (For an account of the physical affections, and other chemical effects of light, see *Optics*, *Phosphorescence*, and *Polarization of Light*.)

Light, Aberration of. (See *Aberration.*)

Light, Diffusion of its Particles. (See *Divisibility.*)

LIGHT CAVALRY, OF HORSE. (See *Cavalry.*)

LIGHTER; a large, open, flat-bottomed vessel, employed to carry goods to or from a ship.

LIGHTFOOT, John, a learned English divine, born 1602, received his education at Christ-church, Cambridge. He made extraordinary advances in the Greek and Latin languages, and became curate of Norton-under-Hales. Sir Rowland Cotton made Mr. Lightfoot his chaplain, and took him into his house, where he applied himself to Hebrew with singular assiduity and success. In 1629, he printed his first work, entitled *Erubhim*, or Miscellanies, Christian and Judaical, which he dedicated to sir Rowland Cotton, who presented him to the vicarage of Ashley, in Staffordshire. Here he resided until his appointment as one of the parliamentary assembly of divines rendered it necessary for him to remove to London. He warmly pressed the speedy settlement of the church, in the Presbyterian form. In 1655, he became vice-chancellor of Cambridge, and zealously promoted the polyglot Bible. After the restoration, he was appointed one of the assistants at the Savoy conference, where he, however, attended but once or twice, giving all his attention to the completion of his *Harmony*. He died Dec. 6, 1675. The works of doctor Lightfoot, who, for rabbinical learning, has had few equals, were printed in 1684, in 2 vols., folio; and again, with additions, at Amsterdam, in 1686; and by Leusden, at Utrecht, 1699, in 3 vols. An octavo volume of his remains was also published by Strype, which contains some curious particulars of his private life.

LIGHTHOUSES were in use with the ancients. The towers of Sestos and Abydos, the colossus of Rhodes, the well-known tower on the island of Pharos, off Alexandria, are examples. Suetonius also mentions a lofty tower at Ostia, and another on the coast of Batavia, erected for the purpose of guiding the mariner by their light. In lighting a great extent of coast, it becomes necessary to provide for the distribution of the lighthouses in such a manner, that they may be readily distinguished from each other, and, at the same time, so disposed as not to leave vessels without some point by which to direct their course; and, in constructing each member of the series, care should be taken to provide for a sufficient brilliancy of light, and for

means of distinguishing each lighthouse from every other, as well as from other lights on shore or in ships, or in the heavens. The best constructed lighthouses, in Great Britain, are fitted up with parabolic reflectors, consisting of a circular sheet of copper, plated with silver, in the proportion of six ounces to each pound of copper, and formed into a parabolic curve, by the assistance of a gauge, by a very nice process of hammering. The reflector, thus shaped, is then polished with the hand. An Argand lamp is placed in the focus of the paraboloidal surface, and the oil is supplied by the lamp behind. But the disadvantages of this mode are acknowledged; such as the loss of light, partly from its absorption by the reflector, and partly from the collision of the rays; the impossibility of increasing the intensity of the light in dark and hazy weather; the difficulty of forming distinguishing lights, &c. The important invention of the polyzonal lenses, in which refraction is employed instead of reflection, seems, therefore, likely to supersede the use of reflectors. This subject is treated by Brewster (*Transactions of the Royal Society of Edinburgh*, vol. xi), and by M. Fresnel, in a memoir read before the academy of sciences at Paris—*Sur un nouveau Système d'Eclairage des Phares* (1822)—and the imperfections of the parabolic reflectors, and the superiority of the polyzonal lenses over others, are explained. Another important problem is the construction of distinguishing lights, so that the mariner may not be deceived in taking one lighthouse for another. Single and double stationary lights, or lights disposed in different forms, were first employed: revolving lights were next adopted, which appeared and disappeared at intervals; and these are sometimes exhibited double or triple. The lights may be so disposed as only to illuminate the safe channel. Difference of color is sometimes made use of as a distinction. It sometimes becomes desirable, as in hazy weather, to produce a very intense light. A plan was proposed, to effect this object, by lieutenant Drummond (*Philosoph. Trans.*, 1826), by directing upon a ball of chalk, a quarter of an inch in diameter, three alcoholic flames, by means of a stream of oxygen. The employment of gas, in lighthouses, has also been recommended.

Floating Light differs from the preceding by its being erected on board a vessel, which is strongly moored upon a sand or shallow, to warn ships against approaching it.

LIGHT INFANTRY; a name given to all foot-soldiers not intended to fight in column, or, at least, to fight chiefly as sharpshooters. They are, in some armies, the opposite to *grenadiers*. However, *light infantry* is not a distinguishing name, according to the present organization of armies. (See *Infantry*, *Tirailleurs*, and *Grenadier*.)

LIGHTNING. (See *Electricity*.)

LIGHTNING-ROD. (See *Conductor*.)

LIGHTWOOD; a name given, in America, to the knots and other resinous parts of pine trees.

LIGNE, Charles Joseph, prince de, a brave soldier and talented author, was born at Brussels, in 1735. The prince de Ligne devoted his early years to the study of the classics and the science of war. In 1755, he entered the Austrian service, and served as captain till 1758. In 1759, he was made colonel. At the end of the war, he was stationed in the Netherlands, with the rank of major-general, and the count d'Artois invited him to the French court, where his society was generally sought, and he was admitted into the privacy of the royal family. He visited England and Italy. In 1770, he was present at the meeting of Frederic the Great with Joseph II, in Silesia. On a visit to Petersburg, he received great honors from the empress. His conduct in the Netherlands had made him very popular. He accompanied the empress Catharine to Cherson. At the commencement of the war with the Turks, he was Austrian ambassador to the Russian army; afterwards, he commanded part of the army which besieged and took Belgrade. He died Dec. 13, 1814. He has given historical accounts of several battles in which he took an active part. His knowledge, experience, activity, and acute observation, appear in his numerous writings, of which 30 volumes were published, at different periods, on a variety of subjects, in verse and prose, in the French language. Madame de Staël edited a selection from them. He gives much information on the leading persons and events of his time, in an amusing and instructive manner.

LIGNUMVITÆ. (See *Guaiacum*.)

LIGNY, BATTLE OF, on June 16, 1815. (See *Quatrebras*, and *Waterloo*.)

LIGURI, Alphonso Maria de, born at Naples, Sept. 26, 1696, and founder of the sect called *Ligorists*, or *Redemptorists*, was originally a lawyer; but some unpleasant circumstances in his profession induced him to become a priest, in 1722. He soon

joined the Congregation for the Propagation of the Faith, which had been instituted in Naples, and occupied himself as a missionary in the instruction of the ignorant peasantry. In 1732, he founded a monastery in the hermitage of St. Mary, at Villa Scala (in the Principato Citra), with the approbation of the pope, the members of which were called the *order of the most holy Redeemer*, and were to be employed in the instruction of the people. This new order soon extended over both Sicilies. The first houses belonging to it were at Salerno, Conza, Nocera and Bovino. For a long time this order, so much like the Jesuits, was unknown beyond the limits of Italy, till, in 1811, they took possession of the suppressed Carthusian monastery at Val-Saint, in the canton of Friburg, the occupants of which (some Trappists) had been expelled. They subsequently appeared in the Austrian dominions, and even in the capital, where they now have a rich establishment. Liguori was, in 1762, appointed bishop of Santa Agata de' Gotici (in the Principato Ultra), by Clement XIII, from which office he was released by Pius VI, in 1775, at his own request, being old, sickly, and so exhausted by fasting and penance, that he was no longer able to perform the duties of his office. He retired to the chief foundation of his order, at Nocera de' Pagani, and died there, Aug. 1, 1787, at the advanced age of 90 years. Since 1816, his name has been enrolled in the Romish calendar of saints. His writings, which are of an ascetic character, have appeared, partly at Naples, and partly at Venice.

LIGURIA, with the Romans, was that portion of the north of Italy, extending along the Mediterranean, from the borders of France to the city of Leghorn, and bounded, on the north, by the river Po. In 1797, the aristocratic republic of Genoa received from Bonaparte a democratic constitution, under the appellation of the *Ligurian republic*. This republic ceased to exist in 1805, when the emperor incorporated it with France. Since 1814, it has formed part of the kingdom of Sardinia.

LILAC (*syringa*). This beautiful and familiar shrub, the ornament of our gardens, is a native of Persia and the surrounding countries. It belongs to the *diandria monogynia* of Linnæus, and to the natural family *jasmineæ*, in which are included the olive, the privet and the jasmine. The corolla is funnel-shaped, and divided into four segments; the leaves

are opposite; and the flowers are agreeably scented, and disposed in large pyramidal racemes, of a bluish or purplish color. It is of easy culture. Three other species of *syringa* are known, all from the Eastern continent.

LILBURNE, John, a republican, during the time of Charles I and Cromwell, born in 1618, was placed with a clothier in London. Of a bold, unquiet and forward temper, one of his first exploits was to summon his master before the city chamberlain for ill usage. He employed his leisure in studying the religious systems and controversies of the time; and the Book of Martyrs, in particular, inspired him with an enthusiastic passion for encountering all sorts of danger in the cause of truth. Dr. Bastwick, then under star-chamber prosecution, employed him to get anti-episcopal strictures printed in Holland. On his return, he employed himself in similar occupations, but, being betrayed by an associate, he was tried before the star-chamber, where his deportment was so firm that he acquired the appellation of *free-born John*. He was doomed to receive 500 lashes, and stand in the pillory, which sentence was executed, in April, 1638, with great severity. On the meeting of the long parliament, a vote passed the house of commons, pronouncing the sentence against Mr. Lilburne barbarous and illegal, and that reparation should be made to him for his sufferings and losses. He then served in the parliamentary army. Dislike to the measures of Fairfax and Cromwell, induced him soon after to lay down his sword, but it was only to take up the pen against all whose political conduct offended him. Being committed to Newgate for contempt, when brought before the house of lords for a libel on the earl of Manchester, he contrived, while thus immured, to publish pamphlets in rapid succession, in which he virulently assailed his enemies, and even made a charge of high treason against Cromwell and Ireton. For this he was ordered to be tried for seditious practices; but so active and numerous were his friends among the people, that, in 1648, the house of commons thought fit to discharge him, and make an order for reparation for his sufferings. At the time of the king's death, he busied himself in drawing up a new constitution, and boldly maintained the rights of the people against the army. So dangerous did he appear to Cromwell and his council, that he was again committed for high treason, but, being tried before a special

committee, the jury boldly acquitted him. A new offence which he gave the parliament, induced that body to pass a heavy fine on him, with an order to quit the country; on which he retired to Holland, until it was dissolved, when he used all his interest to gain a passport, but, not succeeding, he ventured home without one. Being apprehended, he was again committed to Newgate, and once more tried at the Old Bailey, where he defended himself so ably that he was once more acquitted. He then settled at Eltham, in Kent, became a Quaker, and preached at the meetings of that body at Woolwich, until his death in 1657, at the early age of 39.

LILLE, COMTE DE; the name which Monsieur (comte de Provence, afterwards Louis XVIII) adopted when he emigrated, during the life of Louis XVI. He was styled thus also by the French imperial government, and in the *Moniteur*.

LILLO, George, an English tragic poet, born 1693, in London. He was by trade a jeweller, but, notwithstanding his attention to business, he dedicated a considerable portion of his time to the cultivation of the drama. Fielding, the author of *Tom Jones*, himself a dramatist, and the contemporary and personal friend of Lillo, bears strong testimony to the integrity of his heart, as well as to the excellence of his social qualities. An edition of his plays was published, in 1775, by Davies, in two volumes, 12mo. The principal are *George Barnwell*, or the London 'Prentice, a tragedy founded on an incident in domestic life, said to have taken place at Camberwell (this play, till within these few years, it was always customary to represent on lord mayor's day); *Fatal Curiosity*, also said to be founded in fact; *Arden of Feversham*, which was certainly so; and *Elmeric*.

LILLY, John, a dramatic writer, born about 1553, studied at Oxford and Cambridge. He attempted to reform and purify the English language in two fantastic productions entitled *Euphuus* and his *England* (1580), and *Euphuus* and his *Anatomy of Wit* (1581), which met with great success. A specimen of *Euphuism* may be seen in the character of sir *Piercie Sharton*, in the *Monastery* of sir *Walter Scott*. Lilly was also the author of a famous pamphlet against *Martin Marprelate* and his party, entitled *Pappe with a Hatchet*, published about 1589, and attributed to *Nashe*. (See *Warton's Hist. of English Poetry*; *Ellis's Specimens*.)

LILLY, William, a famous English as-

trologer, born at Diseworth, in Leicester-shire, in 1602, went early to London, where his necessities obliged him to articulate himself as servant to a mantua-maker in St. Clement Danes. In 1624, he became book-keeper to a tradesman who could not write, on whose death he married his widow, with a fortune of £1000. In 1632, he turned his attention to astrology; and he gave the public a specimen of his skill, by an assurance, in 1633, that the king had chosen an unlucky horoscope for his coronation in Scotland. About this time, he procured a manuscript copy of a book by Cornelius Agrippa, entitled *Ars notoria*, from which he imbibed the doctrine of the magic circle, and invocation of demons. In the same year, 1634, he was allowed, by the dean of Westminster, to assist David Ramsay, the king's clock-maker, in search of a hidden treasure in Westminster abbey, another associate being found in one John Scot, who pretended to understand the mystery of miners' divining rods. These three worthies accordingly made the experiment on the night appointed, and, after digging up a coffin to no purpose, they were frightened from the place by a violent storm, which Lilly, in the sequel, attributed to demons, whom he had found means to dismiss. In 1644, he published his *Merlinus Anglicus*, which he continued, annually, until his death. Having acquired the friendship of Bulstrode Whitlock, he devoted himself to the interests of the parliament, although he occasionally varied his predictions, in order the more easily to impose on the credulity of the age. In the year 1648, Lilly and Booker, another astrologer, were sent to the camp at Colchester, to encourage the soldiers by their predictions; and such was his reputation, that he was rewarded for his various services (one of which was obtaining secret intelligence from France) with a pension of £100 per annum. About this time, he read public lectures on astrology, and succeeded so well, that he was enabled to lay out £2000 in fee-farm rents at Hors-ham. In 1659, such was the spirit of the age, he received the present of a golden chain from the king of Sweden, whom he had mentioned with great respect in his almanac. On the restoration, Lilly was taken into custody by order of parliament, as one of the depositaries of the secrets of the republicans, and examined concerning the persons who beheaded the king, when he declared that he had been informed that cornet Joyce acted as the

executioner. A short time after, he sued out his pardon under the great seal, and retired to Horsham. In 1666, some of the members, suspecting, from the hieroglyphic to his almanac, that he might know something of the causes of the great fire which followed its publication, had him sent for to a committee of inquiry, when he asserted that he had certainly foreseen the event, but could say nothing as to the cause. His life, lately republished, is a very entertaining production, steering, as he does, between truth and falsehood, and seldom indulging in more of the latter than is necessary to support his character as an astrologer.

LILY; a magnificent genus of plants belonging to the *hexandria monogynia* of Linnaeus. The root is a scaly bulb; the leaves simple, scattered or verticillate; the stem herbaceous, simple, and bearing, at the summit, very large and elegantly formed flowers. The corolla is campanulate, and consists of six petals, which are often reflexed at the extremity. Among the most beautiful of the species, and indeed of all our garden plants, are the *lilium candidum*, or common white lily; *L. martagon*, or Turk's cap; and *L. tigrinum*—all from the Eastern continent. The finest of our own species is the *L. superbum*, which grows, in marshes, to the height of six or eight feet, bearing reflexed orange flowers spotted with black, which, when numerous on the same stem, make a splendid appearance. Five other species, all of them beautiful, inhabit the U. States.—The lily has always held a prominent place in emblematic language. In the middle ages, and in modern times, the white lily has been the emblem of chastity. Hence the Virgin Mary is often represented with a lily in her hand, or by her side. Garcias, the sixth king of Navarre, established an order of the lily in 1048, in honor of the Virgin, because her picture had been found on a lily at Nogera, the royal residence. In the beginning of the fifteenth century, Ferdinand I of Arragon founded an order of the lily or flower-pots, the knights of which wore a double chain, consisting of flower-pots filled with white lilies. The lily, or, rather, the *fleur-de-lis*, as is well known, is the emblem of the Bourbons, and of many other families. The form is well known, and there are various opinions respecting the origin of this emblem. Some think that the figures originally represented the heads of halberds, which they certainly much resemble. Some take them for the flowers

of the iris, which grow on the river Lys. They have even been taken for bees, or for toads. They were adopted, in 1179, by Louis VII. Philip-Augustus first used them on the royal seals. The settled use of three *fleurs-de-lis* began with Charles VI. When the count d'Artois, afterwards Charles X, entered France, in 1814, the lily became a party emblem. The adherents of the Bourbons wore a lily in the button-hole, suspended by a white riband. The French government subsequently distributed them with much profusion, on various occasions; as to pupils who appeared well at public examinations. After the battle of Waterloo, Louis XVIII offered Blücher to give the lily to every Prussian soldier; but he declined the honor. During the revolution of 1830, the lily was not attacked, as the memory of Louis XVIII was respected; but when the Carlists publicly celebrated the day of baptism of the duke of Bordeaux, the people, indignant at such a scene, destroyed the lily wherever it could be found. The government (Casimir Perrier being prime minister) ordered all the crosses and the lilies to be removed from the public edifices, &c., though it had just before been in contemplation to introduce the *fleurs-de-lis* upon the tricolored banners.

LIMA, the capital of the republic of Peru, formerly called *Ciudad de los Reyes* (city of kings), is situated on the river Rimac, from which its present name is derived by a corrupt pronunciation, about 10 miles from the Pacific ocean; lon. 77° 7' W.; lat. 12° 2' S.; population, according to Caldclough (*Travels in South America*), in 1824, 70,000; according to Stewart (*New York*, 1831), who visited it in 1829, 50,000. It is about 700 feet above the level of the sea, and presents a beautiful appearance from Callao, its port. The entrance is by a beautiful avenue, or public walk, called the *alameda*, at the end of which was a handsome gate, now in ruins. Pizarro, in laying out the city, distributed the spaces for the houses into quarters, of 150 *varas*, or Spanish yards. The streets are broad, and uniformly intersect each other at right angles, running either from north to south or from east to west. Small streams of water, conducted from the river above the town, and arched over, contribute to its cleanliness. On the opposite side of the river, connected with the city by a bridge, is the suburb of St. Lazarus. In consequence of the frequency of the earthquakes by which Lima has suffered, the houses are seldom raised more than

two stories, and are commonly built of wood, with flat roofs, from which construction no inconvenience arises, in a country where rain is unknown. The houses of the rich are built in a Moorish style, introduced from Spain. They consist of a square pile, of the height above-mentioned, enclosing a quadrangular court, which is surrounded with piazzas, and sometimes contains a second, or even third inner court. The Plaza, or great square, in the centre of the city, is surrounded partly with shops, and partly with public buildings, among which are the cathedral, and the government, once the vice-regal palace, in which are shown the hall of assassination, where Pizarro was assassinated, and the hall of independence. The riches which have been lavished on the cathedral are almost beyond belief, any where but in a city which once paved a street with ingots of silver, in honor of a new viceroy. The Cabildo, or city-house, built in the Chinese style, the archiepiscopal palace, the mint, the palace of the inquisition (part of which is now occupied as a national museum), and the convent of the Franciscans, said to cover an eighth of the whole city, and which Mr. Stewart found almost deserted, are worthy of notice. Previously to the late changes, the number of monks in Lima was reckoned at 1200, but they are now very few. There are 14 convents for women, and a number of *casas de exercicio*, into which ladies retire for two or three weeks, to perform various acts of pious penance. A university was founded at Lima in 1551, which obtained from the crown of Spain the same privileges as that of Salamanca. The higher classes of the inhabitants are generally well educated, and the women are celebrated for their vivacity and beauty. Both sexes smoke; and this practice is excused, under the pretence that it is rendered necessary by the mists and drizzle (called, by sailors, *Peruvian dew*), which prevail at certain seasons. The manners of the people are so loose as to be proverbial in that part of the world. Music, bull-fights and cards are the principal amusements; dancing, which is a favorite in many of the southern republics, not being popular with the Limanians. The Spaniards of Lima are at present almost all Creoles, the Chaperones, or European Spaniards, having left the country during the troubles. In 1824, there were 15,000 slaves in the city; but the new Peruvian constitution of 1828 abolished slavery. Lima has been repeatedly laid in ruins by earthquakes, more

than 20 of which it has experienced since 1582. The most destructive were those in 1586, 1630, 1665, 1678, when a great part of the city was totally destroyed; those in 1687, 1746, when not more than 20 houses out of 3000 were left standing, and of 23 ships, in the harbor of Callao, 19 were sunk; those in 1764, 1822 and 1828, the two latter of which were very destructive. (For the political events of which Lima has recently been the theatre, see *La Mar*, and *Peru*.)

LIME; the outermost border, or graduated edge of a quadrant, astrolabe, or such like mathematical instrument. The word is also used for the arch of the primitive circle, in any projection of the sphere *in plano*. *Limb* also signifies the outermost border or edge of the sun and moon; as the upper limb or edge, the lower limb, the preceding limb, or side, the following limb.

LIMBO (from the Latin *limbus*, edge, border) signifies, in the Roman Catholic theology, the place on the borders of hell, where the patriarchs remained, until the advent of Christ, who, before his resurrection, appeared to them, and opened the doors of heaven for them. It is not a dogma of the church, but is universally adopted by the Roman Catholics. The word *limbus* is neither found in the Bible, nor in the ancient fathers of the church; yet, as St. Paul says that Christ descended to the lower parts of the earth (*Ephes.*, c. 4, v. 9), it is concluded that good and bad were there; and as the parable of the rich man says, that, between Abraham and Lazarus and the rich man, a great gulf was fixed, it is concluded that the gulf in those regions were not only not tormented, but were separated from the wicked. This *limbo* is called *limbus patrum*. Some theologians adopt a *limbus infantum*, where those infants, who died without being baptized, go; but those who follow St. Augustine do not allow this separation of them from the damned, though they do not believe that they are tormented like the latter. It is not known when the word *limbus* first came into use; but, as *inferi* (hell) seemed to convey the idea of eternal damnation as a punishment, a milder term was adopted. Dante, in his great poem, allows the virtuous heathens to dwell in the *limbus*: thus he finds Socrates there.—*Limbo*, figuratively, means any place of confinement or restraint. Milton's *limbo*—"large and round, since called the paradise of fools, to few unknown"—is borrowed from the *limbus* of the scholastic theologians, and Ariosto's receptacle of lost things.

LIMBURG; the name of several places and provinces, of which we shall only mention the province of the Netherlands, containing 1600 square miles, and 293,000 inhabitants, chiefly Catholics. The Walloon, Flemish, Dutch and German languages are spoken. The principal river is the Meuse. Maestricht is the capital. The celebrated Limburg cheese is made at Limburg, a place in the circle of Verriers, province of Liege (q. v.).

LIME, or **LINDEN** (*tilia*). The species of linden are large trees, with alternate, simple and cordate leaves, and flowers disposed on a common peduncle, which is inserted in the middle of a foliaceous bract. The American lime, or bass-wood, is a large and beautiful tree, inhabiting Canada and the northern parts of the Union, and very abundant on the borders of lakes Erie and Ontario. The leaves are cordate, acuminate, serrate and smooth. The flowers are yellowish, supported on long, pendulous peduncles, and add much to the beauty of the tree. The wood is white and soft, and is used for a few unimportant purposes.—The white lime (*T. heterophylla*) is a small tree, almost exclusively confined to the Western States, where it has usually received the same common names with the preceding. It is distinguished by its large leaves and flowers.—The downy lime (*T. pubescens*) inhabits a more southern district. In Carolina, Georgia and Lower Louisiana, it has received no specific appellation, other than that of *lime*. The leaves are truncated at the base, and very downy beneath, and the flowers numerous. The wood of both these species is soft, and has hitherto been employed for no important purposes. The wood of the European lime, however, though light and soft, like the rest, is smooth, close-grained, and much used by carvers and turners. It is in great demand for the boards of leather cutters, and makes excellent charcoal for gunpowder and for painters. In some countries, the fibrous, inner bark is separated by soaking in water, and manufactured into fishing-nets, mats, shoes and clothing; and the cordage made from it is said to be remarkably strong and elastic. The wood is sometimes cut into thin strips, and used in the manufacture of chip hats, which resemble those made of straw.

LIME. This earth, well known in its most important properties, from the remotest antiquity, exists in great abundance in nature. In treating of it in the present article, we shall first describe its chemical properties, and afterwards speak of its nat-

ural combinations with the acids, or of the minerals to which it gives rise. Lime is obtained with most facility from the native carbonate, from which, by a strong heat, the carbonic acid may be expelled. This process is conducted on a large scale with the different varieties of limestone, which are calcined or burnt, in order to obtain the caustic earth, or *quicklime*, as it is called. The lime thus obtained, however, is rarely pure enough for chemical purposes. The chemist, therefore, when he would obtain a very perfect article, calcines transparent crystals of carbonate of lime, or prepares it from solution, in the following manner: Marble or chalk is dissolved in diluted muriatic acid, leaving an excess of lime undissolved; ammonia is added, which precipitates any alumine or magnesia. The filtered solution is then decomposed by carbonate of potash, and the carbonate of lime, being washed with water and dried, is decomposed by a strong heat. The lime thus obtained is a soft, white substance, of the specific gravity of 2.3. It requires an intense degree of heat for its fusion, which is effected only by the galvanic current, by the compound blow-pipe, or by a stream of oxygen gas, directed through the flame of an alcohol lamp. The light it emits, during fusion, is the strongest the chemist can produce; and it has, accordingly, been employed for a signal light, and for facilitating the observation of distant stations, in geodetical operations. Its taste is caustic, astringent and alkaline. It is soluble in 450 parts of water, according to sir H. Davy; and in 760 parts, according to other chemists. The solubility is not increased by heat. If a little water only be sprinkled on new-burnt lime, it is rapidly absorbed, with the evolution of much heat and vapor. This constitutes the phenomenon of slacking. The heat proceeds from the consolidation of the liquid water into the lime, forming a *hydrate*, as slacked lime is now called. It is a compound of 3.5 parts of lime with 1.25 of water, or very nearly 3 to 1. The water may be expelled by a red heat. Lime-water is astringent, and somewhat acrid to the taste. It renders vegetable blues green; the yellow, brown; and restores to reddened litmus its usual purple color. When lime-water stands exposed to the air, it gradually attracts carbonic acid, and becomes an insoluble carbonate, while the water remains pure. If lime-water be placed in a capsule under an exhausted receiver, which also encloses a saucer of concentrated sulphuric acid, the water will be

gradually withdrawn from the lime, which will concrete into small six-sided prisms. Lime, submitted to the action of galvanism, in high intensity, afforded sir H. Davy satisfactory evidence of its compound nature. It was discovered, in common with the other earths, to consist of a metallic base, which he denominated *calcium*, and oxygen. The calcium was obtained, in these experiments, in the state of amalgamation with mercury. On exposing the amalgam to the air or to water, oxygen was absorbed, and lime re-produced. In an experiment designed to obtain the base in an insulated state, by distilling the quicksilver from it, the tube broke while warm, and, at the moment that the air entered, the metal, which had the color and lustre of silver, took fire, and burnt with an intense white light. Lime, it used to be supposed, combined with sulphur and with phosphorus; but it rather appears that it is its base only that unites with these inflammables. The sulphuret of calcium is formed by heating sulphur with lime in a covered crucible. It is of a reddish-yellow color. When thrown into water, mutual decomposition takes place, and a sulphureted hydro-sulphuret, of a yellow color, with a fetid odor, is produced. Phosphuret of calcium, or phosphuret of lime, as it has usually been called, is obtained in the following manner: a few pieces of phosphorus are placed at the bottom of a glass tube, which is then filled with small pieces of lime. The part of the tube where the lime is, is heated red-hot; and the phosphorus is then sublimed by heat. Its vapor, passing over the lime, decomposes it, and a reddish colored phosphuret of calcium is formed. This substance is remarkable for decomposing water, whenever it is dropped into it, causing an immediate production of phosphureted hydrogen, which takes fire at the surface of the water. When lime is heated strongly in contact with chlorine, oxygen is expelled, and the chlorine is absorbed. For every two parts in volume of chlorine that disappear, one of oxygen is obtained. When liquid muriate of lime is evaporated to dryness, and ignited, it forms the same substance, which is the chloride of calcium. It is a semi-transparent, crystalline substance; fusible at a strong red heat; a non-conductor of electricity; has a very bitter taste; rapidly absorbs water from the atmosphere, and is hence often employed, in chemical experiments, to deprive gases of any hygrometric vapor existing in them. Chlorine also combines directly with lime, forming the very im-

portant substance used in bleaching, formerly under the name of *oxymuriate of lime*, but at present, and more correctly, called *chloride of lime*. It is formed by passing chlorine gas over slacked lime. A great variety of apparatus has been, at different times, contrived for favoring the combination of chlorine with slacked lime, for the purposes of commerce. In the opinion of doctor Ure, who has given particular attention to this manufacture, the following construction for subjecting lime-powder to chlorine is the best: It consists of a large chamber, eight or nine feet high, built of siliceous sandstone, having the joints of the masonry secured with a cement composed of pitch, rosin and dry gypsum, in equal parts. A door is fitted into it at one end, which can be made air-tight by strips of cloth and clay-lute. A window in each side enables the operator to judge how the impregnation goes on, by the color of the air, and also gives light for making the arrangements within at the commencement of the process. As water-lutes are incomparably superior to all others, where the pneumatic pressure is small, a large valve, or door, on this principle, is recommended to be made in the roof, and two tunnels, of considerable width, at the bottom of each side wall. The apartment would thus be ventilated, without the necessity of the workmen approaching the deleterious gas. A great number of wooden shelves, or rather trays, eight or ten feet long, two feet broad, and one inch deep, are provided to receive the sifted slacked lime, containing, generally, about two atoms of lime to three of water. These shelves are piled one over another in the chamber, to the height of five or six feet, cross-bars below each keeping them about an inch asunder, that the gas may have free room to circulate over the surface of the powder. The alembics for generating the chlorine, which are usually nearly spherical, are, in some cases, made entirely of lead; in others, of two hemispheres, joined together in the middle, the upper hemisphere being lead, the under one cast-iron. The first kind of alembic is enclosed, for two thirds from its bottom, in a leaden or iron case, the interval of two inches between the two being destined to receive steam from an adjoining boiler. Those which consist below of cast-iron have their bottom directly exposed to a very gentle fire. Round the outer edge of the iron hemisphere a groove is cast, into which the under edge of the leaden hemisphere fits, the joint being

rendered air-tight by Roman or patent cement—a mixture of lime, clay and oxide of iron, separately calcined and reduced to a fine powder. It must be kept in close vessels, and mixed with the requisite water when used. In this leaden dome, there are four apertures, each secured by a water-lute. The first opening is about 10 or 12 inches square, and is shut with a leaden valve, with incurvated edges, that fit in the water-channel, at the margin of the hole. It is destined for the admission of a workman to rectify any derangement in the apparatus of rotation, or to detach hard concretions of salt from the bottom. The second aperture is in the centre of the top. Here a tube of lead is fixed, which descends nearly to the bottom, and down through which the vertical axis passes, to whose lower end the cross-bars of iron or of wood, sheathed with lead, are attached; by whose revolution the materials receive the proper agitation for mixing the dense manganese with the sulphuric acid and salt. The motion is communicated either by the hand of a workman, applied from time to time to a winch at top, or it is given by connecting the axis with wheel-work, impelled by a stream of water or a steam-engine. The third opening admits the siphon-formed funnel, through which the sulphuric acid is introduced; and the fourth is the orifice of the eduction pipe. The proportion of the materials for generating the chlorine is as follows: 10 cwt. of salt are mixed with from 10 to 14 cwt. of manganese; to which mixture, after its introduction into the alembic, from 12 to 14 of sulphuric acid are added, in successive portions: that quantity of acid must, however, be previously diluted with water, till its specific gravity becomes about 1.65. The eduction pipes from all the alembics terminate in a leaden chest, or cylinder, with which they are connected by water-lutes, having a hydrostatic pressure of two or three inches. In this general *diversorium*, the chlorine is washed from adhering muriatic acid, by passing through a little water; and, from this reservoir, the gas is conducted off by one general pipe, and delivered into the top of the chamber containing the lime, where, in consequence of its gravity, it diffuses itself equally over powder spread out upon the shelves. Four days are required for making good marketable bleaching-powder. The manufacturer generally expects from one ton of rock salt, employed as above, a ton and a half of good bleaching-powder. In using the chloride of lime for bleaching,

the colored cloth is first steeped in warm water, to clean it, and it is then repeatedly washed with a solution of caustic potash, so diluted that it cannot injure the texture of the cloth, and which solution is thrown upon it by a pump. The cloth is then washed and steeped in a very weak solution of the bleaching-powder; again washed, acted on by a boiling ley, as before, and again steeped in the solution; and these operations are performed alternately several times. The cloth is, lastly, immersed in very dilute sulphuric acid, which gives it a pure white color; after which it is washed and dried. The chlorine is known to decompose water, whose hydrogen forms with it muriatic acid, which is always found in the solution (after the process) when liquid chlorine is used, and a muriate, when a chloride is employed. In a similar manner, it is believed to decompose the coloring matter, one of whose elements is always hydrogen; and, its composition being thus subverted, it disappears from the fabric with which it existed. Still more important is the use of the chloride of lime in counteracting contagion, and all noxious effluvia. MM. Orfila, Lescure, Gerdy and Hennelle, having to examine the body of an individual who was supposed to have been poisoned, and who had been dead for nearly a month, found the smell so insupportable, that they were induced to try the application of the chloride of lime, as recommended by M. Labarraque. A solution of this substance was frequently sprinkled over the body, and produced the effect of destroying, after a few aspersions, every unpleasant odor. It was afterwards used in a still more desperate case, in clearing some offensive drains in Paris, with perfect success. It was also found to be the best and most durable means of disinfecting hospitals, &c. In such cases, the powder is so exposed to the infected region as to offer the greatest amount of surface, in order that the carbonic acid of the contagious atmosphere may expel the chlorine from the chloride of lime, which it does by combining with it to form carbonate of lime. A very convenient method of applying it to ordinary apartments, which we are desirous to free from unwholesome effluvia, is to diffuse about four ounces of the powder through five gallons of water, and sprinkle it over the floor by means of a water-pot. Lime combines with the acids, neutralizing the acid properties. Its salts are, in general, decomposed by potash or soda, which precipitate the lime, but not by am-

monia. Oxalic acid throws down lime from all the other acids; and, this compound being quite insoluble, oxalic acid forms the most delicate test of the presence of lime. Carbonate of lime may be formed by adding carbonic acid to lime-water, or by decomposing any of the soluble salts of lime by any of the alkaline carbonates. It is very sparingly soluble in water. Hence lime-water is an excellent test of the presence of carbonic acid. By an excess of carbonic acid, carbonate of lime is rendered soluble. When exposed to heat, it first loses what water it contains, and, if transparent and hard, becomes white, opaque and friable. If the heat be augmented, the carbonic acid is expelled, and quick-lime remains. The experiments of sir J. Hall have proved that if carbonate of lime be heated under strong pressure, so as to prevent the escape of the carbonic acid, it may be melted at a temperature even not higher than 22° of Wedgwood's scale. By this fusion, it acquires considerable hardness and closeness of texture, approaching, in these qualities, as well as in fracture and specific gravity, to the finer kinds of marble. The acids expel the carbonic acid with effervescence; and this property of effervescing strongly, on the contact of an acid, affords a discriminating character of this salt. Carbonate of lime abounds in nature. Nitrate of lime may be formed by dissolving lime, or its carbonate, in dilute nitric acid. The solution, on evaporation, affords deliquescent, prismatic crystals, soluble in less than an equal weight of water, at the temperature of 60°, and in still less of boiling water. On being heated, it becomes phosphorescent, and retains this property when cold, forming Baldwin's solar phosphorus. It forms naturally in the plaster of old buildings, and in the limestone caverns of the Western States. Sulphate of lime is formed by adding lime to dilute sulphuric acid. It requires about 500 times its weight of water, at 60°, for its solution. At the temperature of 212°, it is more soluble, and this latter solution, on cooling, deposits minute crystals. Exposed to heat, it appears to effervesce, or boil, owing to the expulsion of its water; and, at the same time, becomes opaque, and falls into a white powder, which, on being diffused in water, speedily consolidates from a species of irregular crystallization. Sulphate of lime is one of the most abundant minerals in nature. Phosphate of lime may be formed by decomposing the solution of an alkaline phosphate by muriate of lime. It is a white, insoluble

powder, which is imperfectly vitrified by a very intense heat. It exists in the mineral kingdom, under different forms, and constitutes 86 per cent. of the bones of animals. *Muriate* of lime is obtained by dissolving carbonate of lime in muriatic acid. It is extremely soluble in water, the water taking up so much of it as to become of a thick consistence.—*Lime in Agriculture.* Quicklime, in its pure state, whether in powder, or dissolved in water, is injurious to plants. Grass is killed by watering it with lime-water. But lime, in its state of combination with carbonic acid, is a useful ingredient in soils. When lime, whether freshly burnt or slacked, is mixed with any moist, fibrous, vegetable matter, there is a strong action between the lime and the vegetable matter, and they form a kind of compost together, of which a part is usually soluble in water. By this means, matter which was, before, comparatively inert, becomes nutritive; and, as charcoal and oxygen abound in all vegetable matters, the lime becomes converted into a carbonate. Mild lime, powdered limestone, marls, or chalks, have no action of this kind upon vegetable matter; by their action they prevent the too rapid decomposition of substances already dissolved; but they have no tendency to form soluble matter. From these circumstances, it is obvious, that the operation of quicklime and marl or chalk, depends upon principles altogether different. Quicklime, in the act of becoming mild, prepares soluble out of insoluble matter. It is upon this circumstance that the operation of lime, in the preparation of wheat crops, depends, and its efficacy in fertilizing peats, and in bringing into a state of cultivation all soils abounding in hard roots, or dry fibres, or inert vegetable matter. The solution of the question, whether quicklime ought to be applied to a soil, depends upon the quantity of inert vegetable matter it contains. The solution of the question, whether marl, mild lime, or powdered limestone, ought to be applied, depends upon the quantity of calcareous matter already in the soil. All soils are improved by mild lime, and, ultimately, by quicklime, which do not effervesce with acids; and sands are more benefited by it than clays. When a soil, deficient in calcareous matter, contains much soluble, vegetable manure, the application of quicklime should always be avoided, as it either tends to decompose the soluble matters by uniting to their carbon and oxygen, so as to become mild lime; or it combines with the soluble matters, and

forms compounds having less attraction for water than the pure vegetable substance. The case is the same with respect to most animal manures; but the operation of the lime is different, in different cases, and depends upon the nature of the animal matter. Lime forms a kind of insoluble soap with oily matters, and then gradually decomposes them by separating from them oxygen and carbon. It combines, likewise, with the animal acids, and probably assists their decomposition by abstracting carbonaceous matter from them, combined with oxygen; and consequently, it must render them less nutritive. It tends to diminish, likewise, the nutritive powers of albumen, from the same causes, and always destroys, to a certain extent, the efficacy of animal manures, either by combining with certain of their elements, or by giving to them new arrangements. Lime should never be applied with animal manures, unless they are too rich, or for the purpose of preventing noxious effluvia. It is injurious when mixed with any common dung, tending to render the extractive matter insoluble. In those cases in which fermentation is useful to produce nutriment from vegetable substances, lime is always efficacious, as with tanners' bark. (For the use of lime in building, see *Mortar*.) Lime is much used by tanners, skinners, &c., in the preparation of their leather; by soap-boilers, for dissolving the oil, and facilitating its union with the alkaline salt; and by sugar-bakers, for refining their sugar. It is also of some medicinal use, being applied externally in desiccative and epulotic medicines.

Native Salts of Lime, or Calcareous Minerals.—Of these, the first deserving of mention is the *carbonate of lime, limestone, or rhomboidal limestone.* This species, in mineralogy, is one which, from its wide distribution, and the immense masses in which it frequently occurs, constitutes an important rock in geology. Its mineralogical character may be expressed as follows: Fundamental or primary form, an obtuse rhomboid of $105^{\circ} 5'$ and $74^{\circ} 55'$; secondary crystals (of which above 600 are, at present, known) are some variety of the rhomboid, the six-sided prism, or of a double six-sided pyramid, all of which afford the primitive rhomboid, by cleavage, with the most perfect facility. No species in mineralogy is so interesting to the crystallographer as the present. To it we owe our first correct ideas of the internal structure of crystals, and the best theory of crystalliza-

tion which has ever been suggested. Lustre vitreous; prevalent color white, also different shades of gray, red, green and yellow, and dark brown and black colors, from foreign admixtures; streak grayish-white; transparent to translucent; double refraction very considerable and easily observed; brittle; hardness such as to admit of being easily impressed by the knife; specific gravity, 2.72. Besides occurring in distinct crystals, it exists in stalactitic, botryoidal and fruticose shapes, with surfaces uneven, drusy, rough or smooth; and composition columnar, more or less distinct, straight, diverging, and of various sizes. Stalactitic and botryoidal varieties are often composed, a second time, of curved lamellar particles, conformably to the surface of the imitative shape, the faces of composition being uneven and rough, or irregularly streaked in a longitudinal direction. It also occurs massive; the composition being either columnar, in which the individuals are straight, parallel or diverging, and often of remarkable delicacy; or the composition is granular, the individuals being of various sizes, and even impalpable. The individuals, in these varieties, cohere more or less firmly. If the composition be impalpable, the fracture becomes splintery, uneven, flat, conchoidal, or even; on a large scale, it is sometimes scaly. The fracture is earthy in those varieties in which the individuals cohere but slightly. The breaking up of this species into sub-species and varieties, which was practised by the older writers on mineralogy, and which has left us numerous particular denominations, and no little confusion, requires notice in this place. These distinctions, it will be seen, depended chiefly upon the mode of composition, and upon admixtures and impurities with which the individuals have been affected during their formation. Of these, *limestone* represents the greater part of the pure varieties of the species. The simple varieties, and those compound ones in which the individuals are of considerable size, and easily cleavable, have been called *calcareous spar*; compound varieties of granular, still discernible individuals, are *granular limestone*; both comprehended under the head of *foliated limestone*. If the granular composition disappear, *compact limestone* is formed, under which denomination the *oolite*, or *roestone*, was comprehended. The roundish grains, however, of the latter, consist of columnar individuals, disposed like the radii of a sphere, and frequently showing distinct traces of cleavage. *Common fibrous lime-*

stone is produced by columnar composition, in massive varieties; the *fibrous calc-sinter*, by the same, but appearing in various imitative shapes. *Peastone*, or *pisolite*, consists of diverging columnar individuals, collected into curved lamellar ones, forming globular masses, which are again agglutinated by a calcareous cement. Each of the globules, generally, contains a fragment of some heterogeneous matter, as quartz, granite, &c. Compact limestone passes into *chalk*, when the individuals are more loosely connected with each other, so that the whole assumes an earthy appearance; and *rock milk*, or *agaric mineral*, is formed, if the mass contains so many interstices that it seems to possess but a small degree of specific gravity. *Calcareous tufa*, a recent deposit, formed on the surface of the earth, is often cleavable, and thus possesses all the properties of calcareous spar. *Slate spar* is produced by a lamellar composition, in massive varieties, and often exhibits a pearly lustre. *Swinestone*, *anthracolite*, *marl* and *bituminous marlite* are impure and mixed varieties, partly of calcareous spar, partly of compact limestone. The pure varieties of rhomboidal limestone consist of lime, 56, and carbonic acid, 43. Very often, the varieties contain variable proportions of oxide of iron, silica, magnesia, alumine, carbon or bitumen. If pure, it is entirely soluble in nitric acid, during which a brisk effervescence takes place. In the common fire, it is infusible, but loses its carbonic acid, and becomes burnt, or quick lime. Limestone rarely enters into the composition of rocks: in most cases, the more considerable masses of it form particular beds in other rocks, or constitute rocks themselves; the latter consist chiefly, though not exclusively, of compact limestone; the former of granular limestone. The simple varieties occur in drusy cavities, more frequently in veins than in beds, accompanied with the varieties of different species. Calcareous tufa and rock-milk, being of a sintery formation, occur upon the surface, and in fissures of limestone rocks. Stalactitic and pisolitic varieties are produced by calcareous springs and other waters. The mixed, or impure varieties occur in particular strata, between those of compound varieties of other species. It very often occurs in petrifications, imbedded in compact varieties of the same species. Rhomboidal limestone, as has already been remarked, is a species very widely diffused in nature; several of its varieties have a considerable share in the constitution of mountains, in

many countries. This is particularly true in Switzerland, Italy, Carniola, Carinthia, Salzburg, Stiria, Austria and Bavaria, and in several parts of the U. States. Beds of granular limestone, in gneiss and mica slate, abound in all the New England states; also in New York, New Jersey and Pennsylvania; also of the compact limestone, upon lake Champlain, and throughout the vast district contained between the Alleghany mountains, the lakes, and the Mississippi. Of crystallized varieties, the most remarkable occur in Derbyshire and Cumberland, in the mining districts of Saxony and Bohemia, in the Hartz, in Carinthia, Stiria, Hungary and France, and, in the U. States, at Lockport in New York, forming geodes in compact limestone. Iceland is the locality of the purest and most transparent varieties, from whence come the best pieces of the doubly-refracting spar. The crystallized sandstone of Fontainebleau, in France, is a variety of rhomboidal limestone, mechanically mixed with sand. Slate-spar occurs in Saxony, Norway and Cornwall, and, in the U. States, at Williamsburg and Southampton, Mass., in lead veins, as well as in the iron mine of Franconia, N. H. Pisolite is found in Carniola, and at Carlsbad in Bohemia. Most of the varieties are so common as to render the mention of their localities unnecessary. Several varieties of the present species are usefully employed for various purposes, partly depending upon their mechanical, partly upon their chemical composition. Those used in sculpture and in ornamental architecture, are called *marble* (q. v.); the more common or coarse varieties are used for the common purpose of building; a peculiar variety of very fine-grained compact limestone is used for plates in lithography. The best sort is found near Pappenheim and Sohlenhofen, in Bavaria. Quicklime mixed with sand and water forms mortar (q. v.). Carbonic acid, for chemical purposes, is often obtained from chalk or marble powder. It is also a valuable addition in several processes of melting ores, and in producing certain kinds of glass. There is another species, in mineralogy, called *Arragonite*, which was formerly confounded with that just described. In composition, it is scarcely distinguished from rhomboidal limestone, the most accurate analyses having been unable to make known more than from .5 to 4.1 of carbonate of strontites in its composition, besides carbonate of lime. Its crystallization, and other characters, however, sufficiently characterize it as distinct from

limestone. It occurs in crystals, which, at first sight, appear to be regular six-sided prisms; but a close inspection will discover a longitudinal crevice down each lateral face, and somewhat similar appearances converging in the centre of the terminal planes. It also occurs in prismatic crystals, of four or six sides, terminated by planes, the prisms often being so short as to impart to the crystal the general form of an octahedron; these are rarely separate, but mostly cross each other at particular angles. Its crystals yield to mechanical division, parallel to the lateral planes of a right rhombic prism of $116^{\circ} 5'$ and $63^{\circ} 55'$, by measurements taken with the reflective goniometer, on cleavage planes. Lustre vitreous, inclining to resinous, upon faces of fracture; color white, sometimes passing into gray, yellow, or mountain-green; transparent or translucent; brittle; hardness such as to scratch calcareous spar; specific gravity, 2.93. It is very liable to occur in globular, reniform, and coralloidal shapes, and massive, with a columnar composition. Imbedded crystals, generally twins, or consisting of a greater number of individuals, are found in compound varieties of gypsum, mixed and colored with oxide of iron, accompanied with crystals of ferruginous quartz. Other varieties occur in the cavities of basalt and other trap rocks, in lavas, also in irregular beds and veins. It is found in beds of iron ores, in those coralloidal varieties which have been called *stos-ferri*; also massive and crystallized. The first, though they occur in cavities and fissures, are not products of a stalactitic formation. The most beautiful crystals, well defined and transparent, occur near Bilin, in Bohemia, in a vein traversing basalt, and filled with a massive variety of the same species, consisting of large columnar particles of composition. The varieties imbedded in gypsum have been found in the kingdom of Arragon, in Spain, from whence the name *Arragonite* has been derived. Its chief localities are the iron mines of Stiria, Carinthia and Hungary, and the metallic veins of the Pyrenees and England. It has been found, very sparingly, in the U. States. A few specimens of the coralloidal variety have been derived from the gypsum of Lockport, and from between the layers of gneiss, in the quarries of Haddam.—*Sulphate of lime*, or *gypsum*, is a mineral little less extensively diffused than limestone, forming immense beds and veins, in numerous countries. It presents us with a very considerable diversity of crys-

tals, which have, for their primary form, a right-oblique-angled prism, of which the bases are oblique-angled parallelograms of $113^{\circ} 8'$ and $65^{\circ} 52'$. The crystals are either prismatic or lens-shaped, in their general aspect. Lustre vitreous, inclining to pearly; color white, sometimes inclining and passing into smalt-blue, flesh-red, ochre-yellow, honey-yellow, and several shades of gray. Impure varieties assume dark-gray, brick-red, and brownish-red tinges. Transparent or translucent; sectile; specific gravity, 2.31. It occurs massive, in globular masses, in which the individuals are discernible; also granular, passing into impalpable. Those varieties of sulphate of lime which are pure, transparent, and perfectly formed, were formerly called *selenite*, while the more massive and impure varieties were denominated *gypsum*. The latter was again divided into several sub-species, comprehending, almost exclusively, compound varieties, which were easily distinguishable from each other, as their division depended upon the size of the grain, or composition in general. Thus *foliated gypsum* consists of discernible granular particles; *compact gypsum*, of impalpable particles of composition; *scaly foliated gypsum* consists of minute scaly particles; *earthy gypsum*, of a mealy powder; very thin columnar composition produces *fibrous gypsum*. Before the blow-pipe, gypsum exfoliates and melts, though with difficulty, into a white enamel, which, after a short time, falls to powder. In a lower degree of heat, it loses its water, and becomes friable, so as to be easily reduced to an impalpable powder. If mixed with water, this powder becomes warm, and soon hardens into a solid mass. It is composed of lime, 33.0, sulphuric acid, 44.8, and water, 21.0. The massive varieties of this species occur in beds, of a considerable thickness, in secondary districts, in connexion with compact limestone, different kinds of sandstone and clay, in alternating layers, in the latter of which the gypsum sometimes exists in imbedded masses, or crystalline groups. It is not rare to find deposits of rock-salt in its vicinity; and brine springs very often issue from the contiguous rocks. Of the organic remains found in gypsum, those of extinct species of terrestrial quadrupeds, in the Montmartre, near Paris, are the most remarkable. It occurs in a great many countries, particularly in Germany, Switzerland, Austria, Poland, England, France and Spain; in North America, in the U. States, at Niagara falls, Lockport,

and particularly in the vicinity of Cayuga lake; and in New Brunswick and Nova Scotia. Gypsum is variously employed in manufacturing artificial marble, stucco-work, mortar, &c.; also for making casts of statues, medals, &c. It is added to the mass of certain kinds of porcelain and glass. In sculpture, it is used under the name of *alabaster*. But next to its use in the formation of cements, is the use which is made of it in agriculture. It appears to have been first used as a manure in Germany, and afterwards in France, from whence it found its way into the U. States. It was formerly calcined, but is now ground in mills, after the manner of grain. It is particularly adapted to sandy soils and grass lands, and is very extensively used in the U. States. Another species of the same composition with the gypsum, except the water, is called *anhydrite* (q.v.). It is of comparatively rare occurrence. — *Phosphate of lime*, or *apatite*, is found crystallized in six-sided prisms, terminated by one or more planes, or the prism is terminated by a six-sided pyramid, and the lateral edges are sometimes replaced by numerous planes. It yields with difficulty to cleavage, parallel to the side of a regular six-sided prism, which is therefore considered as its primitive form. Lustre vitreous, inclining to resinous; color white, passing into blue, green, yellow, red and brown; transparent or translucent; brittle; hardness above that of flint; specific gravity, 3.22. It also occurs massive. When in fine powder, it is slowly dissolved in nitric acid, and without effervescence. Some varieties are phosphorescent upon ignited charcoal, and before the blow-pipe; others even when rubbed with hard bodies. It does not melt alone, before the blow-pipe. It is composed of lime, 55.0, and phosphoric acid, 45.0. It usually occurs in beds and veins of iron and tin ores. Its principal localities are Saxony, Bohemia, Salzburg and Cabo de Gata, in Spain; from which latter place very beautifully crystallized specimens are obtained, and which have received, from their color, the name of *asparagus stone*. It is also found at St. Gothard, and in Devonshire and Cornwall. It has but few and rather unimportant localities in the U. States. Amity and Saratoga, New York, have afforded the best specimens. *Fluate of lime*. (See *Fluor*.) — *Tungstate of lime*, or *tungsten*, occurs massive, and crystallized in the form of an octahedron with a square base. Lustre vitreous, inclining to adamantine; color generally

white, inclining to yellowish-gray; translucent or transparent; brittle; hardness that of fluor; specific gravity, 6.; infusible before the blow-pipe. It consists of lime, 19.40, oxide of tungsten, 80.42. It is found in Bohemia, Saxony and Cornwall; also in the U. States, at Monroe, in Conn.—*Borate of lime*. (See *Boracic Acid*.)—*Arseniate of lime*, or *pharmacolite*, is a very rare species in mineralogy, found in small quantity at Andreasburg, in the Hartz, and at one or two other places in Europe. It occurs in minute fibres, or acicular crystals, which are commonly aggregated into botryoidal or globular masses. Its color is white, or grayish-white, though often tinged of a violet-red, by arseniate of cobalt, which accompanies it. Specific gravity, 2.6. It consists of lime, 25., arsenic acid, 50.54, and water, 24.46.

LIMERICK, a city on the Shannon, about 60 miles from its mouth, is about three miles in circumference. The principal public buildings are the custom-house, the cathedral, and the bishop's palace. The cathedral is of great antiquity. There are several charitable establishments; also a good public library, and a theatre. It contains four Protestant churches, and eight chapels for the Roman Catholics. There is also an extensive barrack for 22 companies of foot and four troops of horse. Limerick carries on manufactures of linen, woollen and paper. It was taken by the English in 1174. In 1651, it was taken by Ireton. In 1690, it was unsuccessfully besieged by king William in person. In 1691, it surrendered to general Ginkle, afterwards earl of Athlone. Population, from 50,000 to 60,000, in which are 5000 Protestants; 119 miles S. W. Dublin; lon. 8° 31' W.; lat. 52° 36' N.

LIMIT, in a restrained sense, is used by mathematicians for a determinate quantity, to which a variable one continually approaches; in which sense, the circle may be said to be the *limit* of its circumscribed and inscribed polygons. In algebra, the term *limit* is applied to two quantities, one of which is greater, and the other less, than another quantity; and, in this sense, it is used in speaking of the limits of equations, whereby their solution is much facilitated.

LIMNING (from *enluminer*, French, to adorn books with paintings). As these paintings or illuminations were always executed in water-colors, *limning* properly designates that species of art which is now known by the name of *miniature painting*, though it is sometimes used to

signify the art of painting generally, and particularly portrait painting.

LIMOGES (*Augustoritum*, or *Lemovicum*); a city of France, capital of the department of the Haute-Vienne, and formerly of the province of Limousin (q. v.); lat. 45° 50' N.; lon. 1° 16' E.; episcopal see; 25,612 inhabitants. It is an ancient place, and contains some Gaulish and Roman remains. The *hôtel de ville*, cathedral, and episcopal palace, are the principal public buildings. It is also the seat of several literary establishments, and has woollen, linen and cotton manufactures, with paper works, tanneries and iron forges. Several fairs are held here. Birth-place of the chancellor D'Aguesseau.

LIMONADE; a place and plantation in Hayti, very rich in sugar. It was elevated to a lordship by king Christophe, and bestowed upon his minister for foreign affairs, whom he made count de Limonade. With the death of Christophe, the count de Limonade returned to obscurity. Though ridiculed by whites, on account of his title, he showed talents in the conduct of his office. It is not true that Christophe killed him in 1817, as has been said.

LIMONADIÈRE; a very essential personage in a French *café*. (See *Coffee-Houses*, under *Coffee*.)

LIMOUSIN, or LIMOSIN; an ancient province in the centre of France. Limoges was the capital. It forms at present the chief part of the departments of Haute-Vienne and of Corrèze. (See *Department*.)

LINCOLN, Benjamin; an eminent American revolutionary general, born at Hingham, Massachusetts, January 23, O. S., 1733. Until the age of 40 years, he was engaged in agricultural pursuits, and, at the commencement of our revolutionary struggle, in 1775, he held the office of lieutenant-colonel of militia. He was elected a member of the provincial congress, one of the secretaries of that body, and also a member of the committee of correspondence. The council of Massachusetts appointed him a brigadier, in 1776, and soon after, a major-general, when he employed himself industriously in arranging and disciplining the militia, at the head of a body of whom, he joined the main army at New York, in October. By the recommendation of general Washington, congress appointed him a major-general in the continental forces. He commanded a division or detachment in the main army, under the commander-in-chief, for several months, during which period he was placed in difficult situations. The commander-in-chief, in July

1775, despatched general Lincoln to the northern army, under Gates, to assist in opposing Burgoyne. Stationed at Manchester, in Vermont, Lincoln received and organized the New England militia, as they joined him. A detachment of 500 men from his troops, under colonel Brown, surprised the English at the landing at lake George, took 200 batteaux, with 293 men, and released 100 American prisoners. He then joined general Gates's army, of which he was second in command. Here he was wounded in the leg, and his wound confined him at Albany for several months. After suffering the removal of a part of the main bone, he was conveyed to his residence at Hingham. In the following August, he repaired to the head-quarters of general Washington, and was designated by congress to conduct the war in the southern department. He arrived at Charleston, in December, 1778, when he found his duties on that station to be of the most difficult nature. An army was to be formed, organized and supplied, that he might be enabled to contend with a veteran enemy. General Prevost arrived with a fleet and nearly 3000 British troops, about the 28th of December, and, having defeated a small American force, under general Howe, took possession of Savannah. With the design of protecting the upper part of Georgia, Lincoln proceeded to Augusta in April; but the British commander, Prevost, marching upon Charleston, general Lincoln pursued the same route, and, on arriving at that city, found that the enemy had retired from before it the preceding night. June 19, he attacked about 600 of the enemy, entrenched at Stono Ferry, but was repulsed. French forces arrived with the fleet under count D'Estaing, in the early part of September, 1779. Prevost having repossessed himself of Savannah, an expedition was projected against that place, in conjunction with the French commander. For this purpose, nearly 3000 of the foreign auxiliaries were landed, to which general Lincoln added 1000 men from his own troops. The enemy, however, used every exertion to strengthen the defences, and was reinforced while the commander was preparing the articles of capitulation to D'Estaing. A regular siege was then attempted; but, various considerations urging the necessity of speedy operations, a general assault was made by the combined French and American forces, under D'Estaing and Lincoln, on the morning of the 9th of October. Occurrences entirely accidental frustrated their hopes, and, af-

ter planting two standards on the parapets, the allies were repulsed, the French having lost 700 and the Americans 240, in killed and wounded.

After this unfortunate but bold assault, general Lincoln entered Charleston, and, in order to put it in a proper posture of defence, importuned congress for a reinforcement of regular troops, with additional supplies, but his requisitions were but partially granted. General sir Henry Clinton arrived in February, 1780, and, having debarked a strong force in the neighborhood, encamped before the American lines, March 30. Notwithstanding the great superiority of the enemy, general Lincoln determined to attempt the defence of his post, and, accordingly, to a demand of unconditional surrender, returned an immediate refusal, but was obliged to capitulate, May 12, by the discontent of the troops and the inhabitants, the great superiority of numbers on the part of the enemy, and the expenditure of his provisions and ammunition, after a constant cannonade had been kept up for a month. For a fortnight previous to the surrender, he had not undressed to sleep. His reputation was too firmly established to be shaken by the disastrous termination of his southern campaign, and credit was given him for having for three months withstood the power of the British commanders, and so effectually retarded the execution of their future plans. Owing to the delay, North Carolina was saved for the rest of the year 1780. In November following, general Lincoln was exchanged for general Phillips, who had been taken prisoner at Saratoga. In the campaign of 1781, Lincoln commanded a division, and at Yorktown performed a conspicuous part. At that place, the army of Cornwallis capitulated to the combined forces of France and America, on similar terms to those which had been granted to general Lincoln at Charleston. On the latter was conferred the office of receiving the submission and directing the distribution of the conquered troops; and the day succeeding the surrender, his services were commended in the general order of the commander-in-chief. In October, 1781, he was appointed by congress secretary of war, still retaining his military rank. He tendered his resignation of this office three years afterwards, which was received by congress with an expression of their approbation of his conduct both in the field and cabinet. General Lincoln then retired to his farm. In the year 1786—7, the governor of Massachusetts

appointed him commander of a body of militia, despatched to suppress the insurrection conducted by Shays and Day in that state. His dexterity and vigor in this transaction happily effected the object in view, with very little bloodshed, a few persons only being killed in a slight skirmish. In May, 1787, he was elected lieutenant-governor of his native state. He was a member of the convention for ratifying the federal constitution, and, in the summer of 1789, was appointed by president Washington collector of the port of Boston. He was a member of the American academy of arts and sciences, and of the Massachusetts historical society, to the publications of both which he contributed. He died in 1810.

LINDSAY, or LYNDSEY, sir David, an ancient Scottish poet, descended from a noble family, was born in 1490. He entered the university of St. Andrew's in 1505, and, in 1509, became page of honor to James V, then an infant. In 1528, he produced his *Dreme*, and, in the following year, presented his *Complaynt* to the king. In 1530, he was inaugurated Lyon king-at-arms, and knighted, and, in 1531, sent on a mission to Charles V, on his return from which he married. He soon after occupied himself on a drama, of a singular kind, entitled a *Satyre of the Three Estatis*, which was followed, in 1536, by his *Answer to the King's Flyting*, and his *Complaynt of Bascha*. On the death of Magdalen of France, two months after her marriage with James V, Lindsay's muse produced his *Deploration* of the *Death of Quene Magdalene*. During the succeeding regency, he espoused the cause of the reformers, and, in 1548, was sent, in his capacity of Lyon herald, on a mission to Christiern, king of Denmark. On his return, he published the most pleasing of all his poems, entitled the *History and Testament of Squire Meldrum*. His last and greatest work, the *Monarchie*, was finished in 1553. The date of his death is unknown; but the latest authority seems inclined to place it in 1557. Lindsay entered with great zeal into religious disputes, and his satires powerfully assisted to expose the vices of the clergy. As a poet, he is inferior to Dunbar and Gawin Douglas. His *Dreme* is deemed his most poetical composition. An accurate edition of the works of Lindsay was published by Mr. George Chalmers, in 1806.

LINE, MATHEMATICAL, is extension in length, without breadth and thickness; it is either straight or curved. In navigation, the equator is called the *line*; hence

the expression "to pass the line." In decimal measures of length, it is the 10th; in duodecimal measures of length, it is the 12th, part of an inch. In the art of war, a series of soldiers or ships, drawn up in order of battle, are called a *line*; hence the phrase "ships of the line." In genealogy and jurisprudence, it signifies a series of persons, in the order of their descent from a certain ancestor.

LINE, TROOPS OF THE, are contradistinguished from the guards and light troops.

LINE, VESSELS OF THE. (See *Navy*, and *Ship*.)

LINEN; a cloth of very extensive use, made of flax, and differing from cloths made of hemp only in fineness. In common linen, the warp and woof cross each other at right angles; if figures are woven in, it is called *damask*. The species of goods which come under the denomination of linen, are table-cloths, plain and damasked, cambric, lawn, shirting, sheeting, towels, Silesias, Osnaburgs, &c. The chief countries in which linens are manufactured are Russia, Germany, Switzerland, Flanders, Holland, Scotland and Ireland. Of these, Russia principally manufactures sheeting and sail-cloth; Germany, shirtings, sheeting and bagging; Switzerland, both fine and coarse goods; Flanders, the finer articles, especially cambric and lawn; Holland, sheeting of the best description; Scotland, coarse shirting; and Ireland, shirting, damask table-linen and towelling, of superior quality. Immense quantities of linen are annually exported from Ireland to England, and several other parts of Europe, as well as to North and South America, the West Indies and Africa. The flax-seed is, for the greater part, procured from America; but other nations, engaged in this lucrative branch of trade, either raise their seed at home, or procure it from the north of Europe. In several parts of Germany, Switzerland, Flanders and France, linens are frequently embellished with painting; and at London and the other parts of England, the produce of the Irish linen manufacture is beautifully printed in the manner of calicoes. The beauty of linen consists in the evenness of the thread, its fineness and density. The last of these qualities is sometimes produced by subjecting it to rollers; hence linen with a round thread is preferred to that with a flat thread. The warp or woof is not unfrequently made of cotton yarn, which renders the cloth less durable. Linen threads cannot be spun by the machinery used in spinning

cotton and wool, on account of the length and rigidity of the fibres of the flax. The subject of spinning flax by machinery has attracted much attention, and Napoleon once offered a reward of 1,000,000 francs to the inventor of the best machine for this purpose. Machines have been constructed both in Europe and the U. States, which spin coarse threads of linen very well and rapidly. But the manufacture of fine threads, such as those used for cambrics and lace, continues to be performed by hand on the ancient spinning-wheel.—In a historical view, linen is interesting, as forming the dress of the Egyptian priests, who wore it at all their religious ceremonies; hence they are styled by Ovid and Juvenal, "linen-wearing." (See also *Lev. xvi. 4*, and *Spencer On the Laws and Rituals of the Jews.*) From Egypt, linen passed to the Romans, but not till the time of the emperors. The Roman priests also began to wear linen garments at that time. Linen was also used as a material for writing, though the expression *libri lintei, carbasini*, was also applied to cotton and silk, as well as linen. The Sibylline books and the mummy bandages, covered with hieroglyphics, are proofs of this use of linen. In the middle ages, linen and woollen cloth formed the only materials for dress; and fine linen was held in very high estimation; even the writer of the *Nibelungen-lied* mentions it. Germany and Brabant then carried linen manufactures to the greatest perfection. Linen is yet necessary for the manufacturing of good paper. Cotton has, of late years, taken the place of linen for many purposes, on account of its greater cheapness. (See *Cotton*, and *Byssus*.)

LING; a species of marine fish, belonging to the great genus *gadus*. It is from three to four feet in length, and somewhat like the pike in shape. This fish abounds on the coasts of Great Britain, where it has long formed an important branch of trade. It is in perfection from the beginning of February to May; in June, the spawning season commences. When in season, its liver abounds with an oil of excellent quality and flavor; but when it becomes out of season, this organ assumes a red color, and contains but little oil. This oil is procured by subjecting the liver to a slow fire, otherwise a very small quantity is obtained. According to the English law, such of these fish as are cured for exportation, must measure 26 inches from the shoulder to the tail; otherwise they are not entitled to the bounty

granted for the encouragement of this trade. There is another species of ling, the eel-pout (*G. lota*), which is from one to two feet long, of a yellow color, variegated with brown. This is the only species of the genus which is found in fresh water. It abounds in the lake of Geneva. It is amazingly prolific, 128,000 ova having been counted in a single female. It is much esteemed as an article of food, and its liver, which is very voluminous, is highly prized by epicures.

LINGAM; the symbol of the creating and producing power, sacred among the Indians and Egyptians. (See *Indian Mythology*.)

LINGARD, John, D. D., a Catholic priest, settled at Newcastle-upon-Tyne, has displayed considerable acuteness in defence of his religion from the charges brought against it by Protestant writers. He published, in 1805, *Catholic Loyalty vindicated*. The next year, the bishop of Durham, in a charge to his clergy, having attacked the Catholics, Mr. Lingard answered him, in *Remarks on a Charge* (1807). This brought on a sharp controversy, in which several persons of ability took part, and Mr. Lingard published a *General Vindication of the Remarks, with Replies to the Reverend T. Le Mesurier, G. S. Faber, and others* (12mo., 1808). These two pamphlets were followed, on the same subject, by *Documents to ascertain the Sentiments of British Catholics in former Ages* (8vo., 1812); a *Review of certain Anti-Catholic Publications* (8vo., 1813); and *Strictures on Doctor Marsh's Comparative View of the Churches of England and Rome* (8vo., 1815). In the last of these publications, Mr. Lingard asserted that the church of England was modern, compared with that of Rome; an assertion which so much irritated the late doctor Kipling, that he was absurd enough to threaten the author with a process in Westminster-hall, if he did not prove the truth of what he had stated. In 1809, Mr. Lingard published the *Antiquities of the Anglo-Saxon Church* (2 vols., 8vo.), a work of merit. Doctor Lingard is principally known in foreign countries as the author of a *History of England till the Revolution of 1688* (8 vols., 4to., 14 8vo., 1819—1831), of which several editions have appeared, and which has been translated into several languages. Although the object of this work is the vindication of the Catholic church and clergy in England from the party misrepresentations of Protestant writers, yet it is allowed to be written in a candid and dispassionate tone. As a his-

torian, the author is acute and perspicuous, judicious in the selection and arrangement of his materials, and clear and interesting in his narrative. He writes from original sources, which he has examined with care and diligence, and on many points gives new and more correct views of manners, events and characters. In 1826, he published a *Vindication, &c.*, in reply to two articles in the *Edinburgh Review* (Nos. 83 and 87, written by doctor Allen), charging him with inaccuracy and misrepresentation. A more favorable notice of the history has since appeared in No. 105 of the same *Review*. Tytler (*History of Scotland*, 3 vols., 8vo., 1830) charges doctor Lingard with inaccuracy in Scotch history.

LINGUA FRANCA; a corrupt Italian, mixed with other words, the dialect spoken between the inhabitants of the coast of North Africa and the Levant and Europeans. It is, in fact, the Creole of the Mediterranean, and is extremely useful for a traveller in those countries. It is easily learned by one who knows Italian, and still more easily understood.

LINGUA GERAL; a corrupted Portuguese, spoken on the coast of Senegambia.

LINGUET, Simon Nicholas Henry; born in 1736, at Rheims, where his father, who had been professor at the college of Beauvais, was living in a kind of exile, having been banished by a *lettre de cachet*, on account of his participation in the Jansenistic controversy. This circumstance was the origin of Linguet's saying "that he was born under the auspices of a *lettre de cachet*." Having studied law at Paris, in the same college where his father had been professor, and having obtained the three first prizes of the university in 1751, he attracted the notice of the duke of Deux-Ponts, who was at that time in Paris, whom he accompanied on a journey to Poland. Linguet soon returned to his own country, and, on the breaking out of the war between France and Portugal, went to Spain as secretary to the prince of Beauvau. He there made himself acquainted with the Spanish language and literature, and, during his stay at Madrid, he published translations of some of the works of Calderon and Lope de Vega. His first historical attempt, *Histoire du Siècle d'Alexandre*, which was dedicated to the king Stanislaus Leszcinski, was published immediately after his return to Paris. His brilliant oratorical powers, and his thorough acquaintance with the law, gave him a great reputation at the bar, but,

at the same time, his severe remarks and bold ideas created him many enemies. His controversy with D'Alembert, who at that time had almost the entire control of the academy, prevented him from becoming a member of that body. His fame as an author and lawyer, however, increased, and several cases conducted with great ability, such as that of the duke d'Aiguillon against the government, and the criminal cause of the count de Morangès, on which he wrote an excellent treatise, raised him to high consideration, but at the same time excited the jealousy of his colleagues, whom he incensed to such a degree, by some of his diatribes, that they formed a sort of conspiracy against him, binding themselves not to plead with him. Even the parliament became engaged in these disputes, and Linguet, whose replies and remarks increased in bitterness, was struck from the list of parliamentary advocates. As a political writer, he succeeded no better. His *Journal politique*, commenced in 1777, offended the prime minister Maurepas, and was suppressed. Linguet, thinking his personal freedom endangered, went to Switzerland, Holland and England. He afterwards resided at Brussels, until M. de Vergennes procured him permission to return to France; but, his adversaries finding some new cause of complaint, he was thrown into the Bastille by means of a *lettre de cachet*, where he remained above two years, and was then banished to Rethel for a short time (1782). He went again to London, and there published a work against arbitrary power, to which he had fallen a sacrifice, but which he had himself defended in an earlier work, *Théorie des Lois*. He afterwards continued his *Annales politiques* at Brussels, and flattered, with so much address, the emperor Joseph II, who had been pleased with his memoir on the navigation of the Scheldt, that the emperor gave him 1000 ducats, with letters of nobility. But having taken the part of Van der Noot and of the Brabant insurgents, he was ordered by Joseph to leave the Netherlands. In 1791, he again appeared in Paris, and pleaded for the negroes of St. Domingo at the bar of the convention. At a later period, he became an object of suspicion to the terrorists, and, his attempt to escape having failed, he was arrested, June 27, 1794, and condemned to death by the revolutionary tribunal, for having, according to the sentence, flattered the despots of Vienna and London. His writings on law are numerous. Of Linguet's works on

history, politics, political economy, and the fine arts, we mention only his *Histoire des Révolutions de l'Empire Romain*, from Augustus to Constantine; *Fanaticisme des Philosophes*; *Théâtre Espagnol*; *Lettres sur la Théorie des Lois*; *Mémoires pour le Duc d'Aiguillon et le Comte Morangis*; *Du plus heureux Gouvernement*; *Mémoires sur la Bastille*; and particularly his *Annales politiques, civiles et littéraires, du 18 Siècle*, which contain much important matter for the political and literary history of the times.

LINK, doctor Henry Frederic, professor and director of the botanical garden at Berlin, was born at Hildesheim, Feb. 2, 1769, and educated there. In 1786, he went to Göttingen to study medicine, and, in 1788, obtained the prize proposed for the medical students. In 1792, he became ordinary professor of natural history, chemistry and botany, at Rostock. In 1797, he accompanied the count of Hoffmannsegg (q. v.) on his journey to Portugal. In 1811, he left Rostock, and became professor in the university at Breslau; finally, in 1815, he went to Berlin as professor of medicine and director of the botanical garden. Among the writings of this naturalist are his *Observations upon a Journey through France, Spain, and especially Portugal* (3 vols., Kiel, 1801); (the part treating of Portugal is particularly valuable); and his work, the *Primitive World and Antiquity illustrated by Natural Science* (2 vols., Berlin, 1821), which contains the results of many years' deep study. All the writings of this ingenious man are equally distinguished by correctness of language and clearness of description.

LINN, John Blair, an American poet, was born March 14, 1777, at Phippenburgh, Pennsylvania. His poetical talents displayed themselves while he was yet a youth at Columbia college, New York, and, be-

fore he had reached his 17th year, a volume of his effusions, both in prose and verse, was published. After finishing his collegiate course, he commenced the study of law, at the age of 18, with general Hamilton, but continued in his office only about a year, during which time, he brought a tragedy, called *Bourville Castle*, upon the stage, with success. Having removed to Schenectady, and received strong religious impressions, to which he had always been inclined, he entered upon the study of theology, and, in 1798, he was licensed to preach, and soon became distinguished for pulpit eloquence. He was installed pastor of the first Presbyterian church in Philadelphia, in June, 1799. The duties of this situation he discharged for the two subsequent years, in a manner consistent with the fervor of his piety and the excellence of his mind. He continued, however, to cultivate his poetical talents. His *Powers of Genius*, a didactic poem of considerable length, experienced flattering success, and in a few months reached a second edition. In the same volume with it were printed various minor pieces. A controversy in which he became engaged with doctor Priestley, was engendered by a publication of the latter on the merits of Socrates, which were placed before those of Jesus Christ. The religious feelings of Mr. Linn prompted him to answer the doctor's pamphlet, which he did in a manner worthy of his cause. The last work on which Mr. Linn employed his leisure hours, was a narrative poem, published by his friends, under the title of *Valerian*, after his death, which took place August 30, 1804.

LINNÆAN SOCIETY; a society in London, instituted in 1788, by sir J. E. Smith, and incorporated in 1802, for the promotion of the study of natural history.

APPENDIX.

JOSEPH NAPOLEON BONAPARTE,* the eldest brother of Napoleon, of all the members of his family the one in whom the emperor placed the greatest confidence, was born January 7, 1768, at Corte, in the island of Corsica. His father being sent to Paris, as the deputy of the estates of that province, carried him to the continent, and placed him at the college of Autun, in Burgundy, where he completed his course of studies with great diligence. Joseph was desirous of entering the military service, but, in compliance with the last wishes of his father, who died at Montpellier, in the prime of life, he returned to his native country in 1785, and, in 1792, became a member of the departmental administration, under the presidency of the celebrated Paoli. When the English took possession of Corsica, Joseph retired to the continent. In 1794, he married the daughter of

M. Clary, a rich citizen of Marseilles.† Joseph united with his colleagues of the department in urgent entreaties for supplies requisite to drive the English out of the island, but their applications were disregarded until 1796; and it was not until after the occupation of Italy by the French army, that their efforts were crowned with success.‡ In the beginning of this campaign, Joseph accompanied his brother Napoleon, who, after the victory of Mondovi, sent him to Paris to convince the directory of the necessity of concluding a peace with the king of Sardinia. Peace was concluded, and Joseph appointed minister of the republic at Parma, and, a few months afterwards, minister, and then ambassador, at Rome. He had obtained from Pius VII the promise of a brief, exhorting the Vendéans to lay down their arms, and to submit to the republic, when the intrigues of the enemies of France, and the temerity of the revolutionists, produced the catastrophe which obliged him to leave Rome. The papal secretary of state, and the diplomatic characters connected with Joseph, united in rendering him justice in their statements to the French directory. (See the *Moniteur* of Nivose 23, year VI—January 12, 1798.)

* *Joseph Napoleon* were the names given to the subject of this article at his baptism, but he was accustomed to use both names only on important occasions.—We give the present article more space than the limits of this work would seem to allow, because the short period, during which Joseph Bonaparte reigned in Naples and Spain, the eradication of almost every thing good which had been attempted under his administration, on the return of the Bourbons, and the disfiguring effect of party reports, render it very difficult to arrive at the truth in regard to this interesting portion of recent history.—We take this opportunity to correct some errors in our article *Bonaparte*. It was not madame Letitia, the mother of Napoleon, that married captain Fesch, the father of the cardinal, but her mother, madame Ramolini, as we have stated in the article *Fesch*. Madame Letitia did not die in 1822, although an account of her death, with all the particulars of her dying moments, was published about that time. She is still alive. *Carletta* is a mistake for *Paoletta*.

† The sister of Joseph's wife was married to Bernadotte, and is the present queen of Sweden.

‡ It has often been erroneously stated, that Joseph Bonaparte was secretary to Salicetti, a member of the convention (the only member from Corsica who voted for the death of the king). It has likewise been erroneously stated, that Joseph was this year elected member of the five hundred, and that opposition was made to his taking a seat in that body, on the ground that he was not of legal age. Joseph was at this time (9th Fructidor, year V—September 1, 1797) ambassador at Rome.

The pope not giving satisfaction for the murder of general Duphot, committed in the presence of Joseph, who never lost his calmness, and used every means in his power to prevent further bloodshed and outrage, the latter returned to Paris, where the directory expressed their entire satisfaction with his conduct at Rome.* He was now offered the embassy to Prussia, but preferred to enter the council of the five hundred, which soon chose him their secretary. When Napoleon was in Egypt, the French experienced important reverses in Europe. The battle of the Trebia had been lost; the French had evacuated the Genoese territory; the French army in Switzerland was in a critical situation until the decisive victory of Masséna at Zurich, and all the conquests in Italy were at stake. Joseph despatched a Greek of Cephalonia, named Burmbacki, to Egypt, to induce his brother to hasten back; and he assisted him in the revolution of the 18th Brumaire, year VIII, which placed general Bonaparte at the head of the consular government. Under the consulate, Joseph was a member of the council of state, and, as such, was appointed, with Röderer and De Fleurieu, to terminate the differences then existing between France and the U. States. The treaty of September 30, 1800, was signed at Joseph's estate of Mortefontaine. Soon after (February 9, 1801), he signed, with count Cobentzl (q. v.), the treaty of Lunéville, between France and Austria. March 25, 1802, the treaty of Amiens was signed, which, on the part of France, had been likewise conducted under his direction. Whilst engaged in diplomatic pursuits, Joseph suggested a plan to unite France, England, Spain and Holland, for the suppression of that system of rapine and piracy, whereby smaller states were annoyed by the corsairs of Barbary, to the disgrace of the great powers of Christendom. His brother, then first consul, adopted the plan. In 1803, Joseph was created a senator and grand officer of the legion of honor, and presided, in the same year, in the electoral college of the department of the Oise. Joseph Bonaparte was one of the signers of the concordat with the pope, by which the immunities of the Gallican church were secured, and the torch of fanaticism,

* The assassination of general Duphot, and that of the unfortunate Basseville, who, at the time of his death, five years previously, was French envoy at Rome, determined the directory to declare war against the pope, and, February 15, 1798, the States of the Church were changed into a republic.

which burned in the West of France, was extinguished. Nearly at the same time, the treaty of guaranty was signed with Austria, Russia, Prussia and Bavaria, which recognised the various political changes which had taken place in the German empire. In this negotiation, also, Joseph was invested with full powers on the part of France. When, in 1804, the camp of Boulogne was formed, the consul made his brother colonel of the fourth regiment. When Napoleon ascended the imperial throne of France, the same *senatus-consulte* which (supported by 3,700,000 votes) created Napoleon emperor, declared Joseph and his children heirs to the throne, in case of the death of Napoleon without issue.† In the same year, the crown of Lombardy was offered to him, but Joseph firmly resisted the entreaties of the emperor and of his friends, not choosing to renounce the new political bonds which attached him to France, nor to enter into engagements which pressed hard upon Lombardy. During the campaign of Austerlitz, in 1805, prince Joseph presided in the senate, and administered the government. A few days after the battle of Austerlitz, Joseph received an order from the emperor to place himself at the head of the army destined to invade the kingdom of Naples, whose sovereign had broken the treaty with France, and whose troops had been augmented by a large body of Russians and English, in consequence of which Napoleon had declared, "Ferdinand has ceased to rule." On February 8, 1806, the French entered the territory of the enemy. Joseph commanded the centre, whilst Masséna and Gouvion de Saint-Cyr commanded the two wings, took Capua, which surrendered without much resistance, and entered the capital February 15, being received, if any reliance were to be placed upon public demonstrations of joy, as the deliverer of the people. King Ferdinand had fled to Sicily, and the English and Russians effected their retreat. All the fortresses were to be delivered up to the French; and Gaëta, commanded by the prince of Hesse-Philippsthal, only resisted, the commandant disavowing the regency which Ferdinand had appointed before his flight, and which had concluded the treaty with Joseph. The very day of his entry, Joseph was seen walking about in the street, attended by one aid-de-camp

† In the chronological table in volume VI (article *History*, year 1806), Eugene Beauharnais is said to have been declared successor to the imperial throne: *imperial* is an erratum for *Italian*.

only, even among the crowds of still excited lazzaroni, faithful to his opinion that the people feel confidence in those who trust them, and never pay with bad treatment those who have treated them well. No sooner had he organized a provisional government in the capital, than he set out with a *corps d'élite* under the command of general Lamarque (q. v.), to inform himself of the actual state of the country, and of the feasibility of an attempt upon Sicily. He soon convinced himself of the abject situation of the inhabitants (whom the character of former governments had rendered pretty indifferent as to any change of the administration, believing that nothing would improve their situation), and of the impracticability of a landing in Sicily. It was during this journey, that Joseph first received intelligence that the emperor had recognised him king of Naples. Napoleon, fearing that Joseph would refuse the throne of Naples, as he had refused that of Lombardy, consented that Joseph's relations with France should remain the same; and the senate, of which he was president, in his capacity of grand-electer, deputed three of its members to him to induce him to accept the offered crown. These were marshal Perignon, general Ferino and count Rœderer. Joseph received them as his old colleagues, lodged them in the palace, and retained count Rœderer (q. v.), who had long been his friend, as minister of finance. Joseph was always pleased to acknowledge his obligations to this friend, for his services in the administration of the finances, and in the formation of the laws and institutions which created a public credit—something till then unknown in that country. Napoleon said that the loss of count Rœderer from his council of state was never adequately supplied. Joseph's reign in Naples forms the period of his life on which the biographer dwells with the greatest satisfaction. It was the misfortune of Joseph to be twice called to rule over nations guided by priests, and left in ignorance, and therefore easily to be excited against any change; yet the critical nature of his situation did not deter him from trying every means in his power to ameliorate the condition of his subjects. He introduced into his council, among others, Frenchmen distinguished by their abilities; such as Rœderer, Salicetti, Dumas, Miot, &c. With them he planned such changes as his unreserved conversations with men of all classes, on his long journey, had suggested to him. He held up to the mem-

bers of his administration the advantageous consequences of the French revolution, contriving to avoid its evils, and enjoining them to make justice and moderation the guides of all their measures. The country was soon entirely cleared of the enemy. Convents were abolished, and their inmates provided for; their rich possessions were in part used to contribute to the solidity of the public credit; feudalism was overthrown, leaving only the honorary titles; provincial intendants were appointed instead of the former *presidi*, a kind of proconsuls; public instruction greatly improved; the finances regulated, as we have already mentioned, under the care of Rœderer; the interior custom-lines, so injurious to the welfare of nations, removed to the frontiers; the system of justice greatly improved by substituting the French code for the confused *pragmatiche*, and by organizing the judiciary; national guards were formed—an institution which, in that as well as all the other Italian countries, would have had the best effects. These effects, indeed, were in part apparent in the growth of a civic spirit among the inhabitants, so long degraded by foreign or domestic tyranny. A new army was created; the public debt was put on a systematic footing; all banks were united into one; excavations (q. v.) at Pompeii and in Magna Græcia begun, and a learned society founded, under the name of the *royal academy*, divided into four classes; the roads were improved; the system of the *mesta** abolished, according to an early plan of the celebrated Filangieri; the stiff and pompous Spanish court etiquette was much curtailed, so that the king became accessible to his subjects; and the half-barbarous lazzaroni were civilized. Villages were established, and the lazzaroni were made to labor in excavations or workshops. Their pay was partly given in beds, and in domestic utensils, so that their improvement was begun in the only way in which it could be successful—by accustoming them to a home. Thus a numerous class, who had resisted all attempts to civilize them, and with whom neither missionaries nor philanthropists could be successful, were rendered useful,

* The system consisted in withholding from culture a large district under the name of the *Tavoliere di Puglia*, belonging to the crown. This was dedicated to the pasturage of innumerable flocks, which resorted thither every year from all parts of the kingdom. The *mesta* being abolished, this territory was sold, and brought into luxuriant cultivation.

and a fruitful source of crime would soon have been entirely stopped. He who formed the idea of civilizing these beings by giving them a home, whether it was the king or one of his counsellors, richly deserves the thanks of the country, though the return of the Bourbons was unfortunately also the signal for the return of wretchedness.—The bands of robbers likewise vanished. When Joseph arrived in Naples, the revenue of the state did not exceed 7,000,000 *ducati*. It was augmented by him to 14,000,000, without increasing the public burdens. Naples then had no constitution, but Joseph, presiding in person at the meetings of the council of state, heard every measure discussed, and no instance is on record of a measure being adopted against the opinion of the majority. Success was crowning his laudable endeavors, when, unfortunately for him, he was, against his will, called by his brother to receive a prouder diadem. As the period upon which we are now entering has been made the subject of great misrepresentations, and forms, at the same time, an important part of the history of Napoleon's time, and of Spain, we shall treat of it at some length. In an interview, some months previous, with the emperor Napoleon at Venice, he received an intimation of the feuds which distracted the reigning house of Spain, and of the political embarrassments to which they must lead. He now received from Bayonne, where the Spanish princes had joined Napoleon, a pressing invitation to proceed without delay to that city. Nothing was yet decided, and no views explained. In this uncertainty, Joseph set out, cherishing the hope of again returning to his family at Naples. At a short distance from Bayonne, he was met by the emperor, who informed him that the passions of the Spanish princes had produced a crisis, which had arrived but too soon; that they were as far from a harmonious agreement at Bayonne as they had been in Spain; that Charles IV preferred retirement in France, on certain conditions, to reëntering Spain without the prince of peace; that both he and the queen chose rather to see a stranger ascend the throne than to cede it to Ferdinand; that neither Ferdinand nor any other Spaniard wished for the return of Charles, if he was determined to restore the reign of Godoy, and that they also would prefer a stranger to him; that he (the emperor) perceived that it would cost him a greater effort to sustain Charles, with the prince of peace, than to

change the dynasty; that Ferdinand appeared to him so inferior, and of a character so vague and uncertain, that it would be highly indiscreet to commit himself on his behalf, or attempt to sustain a son in the struggle to dethrone his father, and that such a dynasty was as little suited to Spain; that no regeneration was practicable whilst it continued; that the first personages of the kingdom, in rank, information and character, assembled in a national junta at Bayonne, were convinced of this truth; and that, since destiny pointed out this course, and he then felt assured of accomplishing what he would not have voluntarily undertaken, he had nominated his brother, the king of Naples, who was acceptable to the junta, and would be so to the nation at large. Ferdinand had long since solicited one of his nieces in marriage, and the kingdom of Etruria, but, since his residence at Bayonne, and more intimate knowledge of that prince, he did not think proper to accede to his wishes. He further urged that the Spanish princes had gone farther into France, and had ceded to him all their rights to the crown, which he had transferred to his brother, the king of Naples; that it was highly important that his brother should not hesitate, lest the Spaniards, as well as foreign monarchs, might suppose that he (Napoleon) wished to encircle his own brows with this additional crown, as he had done with that of Lombardy, some years before, upon the refusal of Joseph to accept it; that the tranquillity of Spain—of Europe—the reconciliation of all the members of his own family,* depended upon the course which Joseph was then about to adopt; that he could never allow himself to believe, that regret at leaving an enchanting country, where no danger or difficulty remained to be combated, could induce him to refuse a throne where many obstacles, it was true, were to be surmounted, but where also much good was to be accomplished. When Joseph arrived at Bayonne, the members of the junta were all assembled at the château of Marrac, and he was obliged to receive their addresses, to which he returned indefinite answers, postponing a decision until he could, in the course of a few days, see the different members in private. The Spanish princes were gone. The duke del Infantado and Cevallos passed for the warmest partisans of Ferdinand: both were presented the next

* It was then proposed to recognise Lucien as king of Naples.

day to take leave. Joseph had a long conversation with the duke, which terminated in a full offer of his services. This nobleman then observed, that he now found the intelligence which had been transmitted to him by his agents at Naples was true, and if Joseph was destined to be to Spain what he had been to Naples, no doubt could exist that the entire nation would rally round him. He also assured him that he would find the same dispositions in Cevallos, and in all the members of the junta; that those who were regarded as the most violent partisans of Ferdinand entertained for that prince, of whom they knew little, and expected every thing, merely that sort of attachment which a misgoverned nation exhibits towards any one whom it considers most competent to redress its grievances. Cevallos held nearly the same language to Joseph, who afterwards received, in succession, all the members of the junta. It consisted of nearly 100 persons. They painted, in strong colors, the evils which afflicted their country, and the facility of suppressing them. In fact, the courtiers of the father and the son were agreed upon one point—the absolute impossibility, namely, of their living together under either of them. Joseph alone, by sacrificing the throne of Naples to ascend that of Spain, appeared to unite all parties, and promised, as they fondly hoped, to restore and even to surpass the happy reign of Charles III. The rising at Saragossa, and in several of the provinces, under the pretence that Napoleon was seeking to annex Spain to France; the assurances given by all the members of the junta (without a single exception) to Joseph, that his acceptance of the crown would quiet these troubles, insure the independence of the monarchy, the integrity of its territory, its liberty and happiness, finally induced him to accept the throne, and he prepared himself to set out for Spain; but he would not leave the throne of Naples without obtaining a pledge that his institutions should be preserved, and that the Neapolitans should enjoy the benefits of a constitution which was, in a great measure, a summary of his own most important laws. He obtained for it the guaranty of the emperor Napoleon. A constitution, founded nearly on the same principles, was adopted by the junta of Bayonne for Spain, and also guarantied by the emperor. Joseph, and the members of the junta, swore fidelity to it. Had events permitted them to maintain their

oaths, it would have contributed much to the regeneration of that people. The recognition of national sovereignty represented in the cortes, the independence of their powers, the demarcation of the patrimony of the crown and the public treasure, would have extricated Spain from the abyss into which she had been sinking for centuries. The accession of Joseph to the throne of Spain was notified by the secretary of state (Cevallos) to the foreign powers, by all of whom, with the exception of England, he was formally recognised. Thus, at first, his relations with the monarchs and governments of the continent were satisfactory. The emperor of Russia had replied to the communication of general Pardo, ambassador of Spain, by felicitations grounded on the personal character of the new king. Ferdinand had written him letters of congratulation, and one among others wherein he implored his intervention and good offices to induce the emperor Napoleon to give him one of his nieces in marriage. The oath of allegiance of the Spaniards who were with him in France was annexed to these letters, which were made known by a Spanish nobleman to the chiefs of the insurrection. Most of the members of the junta had previous knowledge of them. Upon his entry into Madrid, Joseph found the people greatly exasperated at the events of the second of May, 1808. A stranger to all that had passed, he convened, on the morrow, at the palace, all those persons who might naturally be regarded as representatives of the different classes of society—grandees of Spain, chiefs of the religious orders, members of the tribunals, priests, officers, generals, the principal capitalists, the syndics of the various handicrafts. All the saloons were crowded, for the first time, with a concourse of men who were astonished to find themselves together. The new king entered into free conversation with his guests, and expressed himself with candor on the events which had brought him into Spain, on the motives of his conduct, on his views and intentions. He ventured alone into the different rooms, filled with crowds of persons inimical to him, and inspired much confidence by this fearless reliance on their honor; but the gleams of popular favor were overcast by the disastrous intelligence from Baylen, which arrived six days after this entertainment. The retreat on Burgos was effected, and the king found himself in the midst of marshal Bessières' army. The Spaniards

flocked in from all quarters against the French army, which was unable to resume offensive operations until the month of November. The emperor arrived, and put himself at the head of his army, but was soon summoned, first by the English to the frontiers of Galicia, whence he drove them out, and then by the Austrians to Germany. On his departure, he left his brother in command of the forces that remained in Spain. King Joseph returned to his capital January 22, 1809. The people had not lost the remembrance of the hopes which they had conceived on his first entry. The inhabitants came individually to take the oath of allegiance to him, each in his respective parish. Joseph exerted himself to foster and extend these favorable symptoms. On a solemn occasion, he renewed the assurances he had already given of his determination to maintain the independence of Spain; to preserve her territory entire; to support her religion, and to protect and uphold the liberty of her citizens—"conditions," he said, "of the oath which I took on accepting the crown: it shall never be dishonored whilst on my head." He pledged himself for the convocation of the cortes, and for the evacuation of Spain by the French troops, as soon as the country should be pacified. "If I love France as my family," he often exclaimed, "I am devoted to Spain as to my religion." The choice of his ministry was made with entire deference to public opinion. The nomination of the members of his council of state was governed by the same spirit. Five regiments were already organized, from which all persons stained by criminal convictions were carefully excluded. Infamous punishments were discontinued, and the stimulus of honor and love of country, as in the French army, was substituted for corporal inflictions, which are fit only to make slaves, not soldiers. Pursuing the same course which his own sense of justice and views of policy had dictated in his former government at Naples, he recognised the existing public debt, and provided means for its extinction; gave facilities for the secularization of monks, without, at that moment, compelling it; inspected, in person, the works then unfinished and necessary to the completion of the Guadarama canal; promoted that useful enterprise; and generally gave aid and countenance to national industry in its various departments. The earliest military occurrences of his reign were propitious. The battles

of Talavera and Almonacid paralyzed the enemy's movements, and the king availed himself of the calm which ensued, to regulate the administration of the interior. He now resolved to suppress entirely the religious orders, being convinced that the restoration of the finances and the claims of public tranquillity alike demanded this measure. All ecclesiastical jurisdictions were annulled, and their duties assigned to the civil tribunals, and the privilege of sanctuary heretofore allowed to the churches was abolished. The councils of the Indies, of the orders, of finance, of the marine, and of war, whose functions were almost identical with those of the new council of state, were dissolved; the points for the collection of the duties fixed on the frontiers; the municipal system was settled; laws regulating public education were digested in the council of state; the debt, which had been formerly recognised, was guaranteed; the ashes and monuments of the illustrious dead, scattered through the suppressed convents, were assembled in several churches, and particularly in the metropolitan at Burgos. The buildings of the Escorial were assigned for the reception of fifteen hundred priests, members of the different religious orders, who were desirous of continuing to live in common, either from family reasons, considerations of health, or a strong bias to consecrate themselves to study in those vast deposits wherein lay buried large collections of manuscripts and other literary treasures, so richly meriting examination and perusal. The buildings of St. Francis were chosen for the sittings of the cortes, and the alterations to be made in them put under contract. One hundred millions of reals were appropriated as an indemnity to owners of property who had suffered by the ravages of war. Joseph proscribed no individual because he had been a member of any particular corporation. In his council of state were to be found superiors of religious orders who voted for the suppression of those orders;* general officers of the insurgents who voted against the insurgents;† inquisitors voting against the inquisition;‡ and in his family and household, grandees of Spain openly advocating the most popular laws. A few months after his return to Madrid, Joseph received intelligence that 50,000 Spaniards had made a descent

* Father Rey, general of the Augustines.

† Lieutenant-general Morla, who long held the command at Cadiz and Madrid.

‡ The abbé Llorente. (q. v.)

from the Sierra Morena into La Mancha. He marched against them, and, at Ocaña, they were entirely discomfited by 20,000 French and 4,000 Spaniards in his service. 25,000 prisoners, most of whom entered his army, thirty standards, and the entire artillery of the army, were the fruits of this victory. The English, who had advanced to Truxillo and Badajoz, retired to Portugal as soon as they learned the destruction of the Spanish army. Upon his return to the capital, the king was informed of the successes of general Kellermann at Alba de Tormes, of marshal Suchet in Arragon, and marshal Angereau in Catalonia, where Gerona had fallen into his hands. He resolved to follow up this series of good fortune. The junta of Seville having summoned the cortes for the month of March, he determined to anticipate them. Leaving Madrid on the 8th of January, 1810, a very few days after the battle of Ocaña, he found himself, on the 11th, at the foot of the Sierra Morena, with a force of 60,000 men. Marshal Soult acted as major-general, in place of marshal Jourdan, the latter having returned to France. The positions of the enemy were carried in a few hours, and 8000 or 10,000 prisoners taken. The king was attended by his ministers and the principal officers of his household and guard. He openly announced his intention to hold the cortes at Grenada in the month of March. Cordova surrendered to him without firing a gun. Joseph pledged himself, without reserve, that as soon as the English evacuated the peninsula, the French armies should also leave it, and that he would follow in their steps, unless retained by the sincere wishes of the nation, when enlightened as to its true interests: he stated that the constitution of Bayonne was now sufficient for the habits and wants of the people, but admitted that it might hereafter be modified according to circumstances; that the nation could never enjoy a greater share of liberty than the king wished it to possess, inasmuch as he never could feel himself truly her king, until Spain was truly free, and delivered from the presence of all foreign armies. Marshal Victor advanced upon Cadiz, and the king made his entry into Seville, where he was received with enthusiasm. It was in Seville that he received, from the hands of the chapter, the French eagles which had fallen into the hands of the Spaniards, after the disastrous affair of Baylen. They had been left in the cathedral, where they lay hidden amongst

relics of the saints. They were instantly forwarded to Paris, by colonel Tascher de la Pagerie. Ten thousand men, however, under the duke of Albuquerque, had anticipated marshal Victor at Cadiz; the English also hastened thither, and strongly reinforced the garrison, whilst their squadrons blockaded the harbor. The chiefs of the insurrection had assembled at Port St. Mary's, in front of Cadiz. They surrounded the king, from whom they received the assurance of his positive determination to assemble the representatives of the nation at Grenada immediately. All the members of the central junta were to form part of this cortes; all the bishops—all the *grandees*—all the wealthy capitalists. This assembly would have a single question to discuss—"Do we, or do we not, accept the constitution and the king offered to us by the junta of Bayonne?" If the negative was pronounced, Joseph would leave Spain, fully determined to reign, if at all, by the consent of the people, as he wished to reign for their benefit. But the deputies who undertook to go themselves and treat with their fellow citizens, unfortunately embarked in small boats, and were detained by the English squadron, and not allowed to land in Cadiz. On the other hand, the French government was becoming weary of the enormous sacrifices which the obstinate resistance of Spain required. They thought that the war there, as in other countries, ought to support itself. The king's system, on the contrary, forbade exactions, and tended to calm the exasperation of the Spaniards by kind treatment. He consequently required that France should continue her sacrifices and her expenditure. About this time, a measure was adopted by Napoleon, which gave the king the most lively concern. An imperial decree instituted military governments in the provinces of Spain, under which the French general of division became president of the administrative junta, and the Spanish intendant was reduced to the station of a simple secretary of the body in which he had formerly presided. This state of things could not fail to destroy all the good which had been effected by the campaign of Andalusia. Abandoning, now, all hopes of bringing about the surrender of Cadiz by the conciliatory measures which he had employed, Joseph left Port St. Mary's to visit the eastern part of Andalusia, and directed his route through Ronda. In the course of this journey, he expressed to the deputations from

Grenada, Jaén, and Malaga, his firm resolution never to consent to any dismemberment of the monarchy, or to any sacrifice whatever of national independence—very far, in these particulars, from entertaining the sentiments of Ferdinand, who had actually proposed to the emperor a cession of the provinces on the Ebro. On his return to Seville, the king issued decrees prescribing territorial divisions, organizing the civil administration within these districts, and directing the formation of national guards. He then intrusted the command of the army of Andalusia to marshal Soult, and returned to Madrid, after an absence of five months. The duke of Santa Fé and the marquis of Almenara, two of his ministers, were despatched to Paris. The latter was the bearer of a letter from Joseph, announcing his determination to leave a country where he could neither do good nor prevent evil, if the system of military governments was not abandoned. The situation of the emperor was then so complicated and critical, that he could not yield to the wishes of the king. King Joseph proceeded in person to Paris, where he had an interview with his brother. The emperor induced him to return to Spain, by the positive assurance which he gave him, that the military governments should soon cease; that the system had already wrought a good effect upon the English government, who offered to retire from Portugal, if the French troops would evacuate Spain, and to recognise king Joseph, if the Spanish nation recognised him, and France would also consent, on her part, to recognise the house of Braganza in Portugal. The different military districts were to be put under the command of king Joseph, the cortes convened, and the French armies to evacuate Spain as soon as the king was satisfied that their presence was no longer necessary. The subsequent events of this war must be rapidly touched. Marshal Masséna, who had entered Portugal at the head of an army of 75,000 men, after taking Almeida and Ciudad Rodrigo, and defeating the English at Busaco, was compelled, in March, 1811, to withdraw his troops, then reduced, by sickness, forced marches, and want of provisions, to 35,000 men. Marshal Soult laid siege to Badajoz, which surrendered March 19. Marshal Victor had been attacked in his lines at Chiclana. The English had kept alive the flames of insurrection, by landing troops, money and arms at Cartagena and Alicant, and encouraged, by

every means in their power, the resistance of Cadiz. It was at this moment, that the first rumors were circulated of the approaching rupture between France and Russia. The English, no longer held in check by the army of Portugal, had occupied Ciudad Rodrigo and Badajoz. Marshal Victor, the remainder of the imperial guard, and several regiments of the line, were recalled to France. All hopes of a negotiation with England had vanished; partial insurrections multiplied; new guerillas were formed, supported by the gold of the English and the exasperation of the inhabitants; the communications became more difficult than at any previous time. Navarre was ravaged by the band of Mina, now swelled to an army; famine was laying waste the capital and the provinces. Such was the face of affairs when the emperor Napoleon, setting out on his Russian campaign, invested king Joseph with the command of the armies. Under such circumstances, honor no longer permitted him to retire from a post of difficulty and danger. Marshal Jourdan returned to him. In the early part of May, 1812, the English, having taken the fortifications erected for the defence of the Tagus, threatened at the same time the army of the south and the army of Portugal. Early in July, Joseph marched from Madrid with the guard and the troops of the neighboring garrisons, directed his march on Penaranda, and joined marshal Marmont, who had passed the Tormes on the 20th, and been defeated at Arapiles. November 3, he returned to Madrid. Having remained a single day at Madrid, Joseph passed the Tormes, and found himself on the battle field of Arapiles, at the head of more than 100,000 men. But the rain, which had been falling in torrents, had rendered the roads nearly impassable, and greatly retarded the movements of the army of the south. The English profited by this delay, and hurried their retreat by the road of Ciudad Rodrigo, which still remained unoccupied. The success of this day was limited to 5000 or 6000 prisoners, among whom was the English general of cavalry lord Paget. The king entered Salamanca with the army of Portugal. The enemy retired to Portugal, and the French army soon found itself weakened by the loss of more than 30,000 men, who received orders to repress the Pyrenees. He soon after received a positive order from the emperor to leave Madrid and take up the line of the Duero. The state of affairs in Russia made obedience to this

order a matter of positive duty, and the departure of the king for Valladolid took place instantly. As soon as Madrid was abandoned, the fires of insurrection were kindled, and raged with greater violence than ever. Spaniards, English, Portuguese, all advanced upon the French army, then enfeebled by the loss of its best officers, who had been withdrawn to aid in the formation of new corps in France. After the battle of Vittoria, Joseph returned to Paris, where his brother, the emperor, again left him, with the title of his lieutenant, when he departed to put himself at the head of that army, which, after assailing all the armies of Europe in their respective countries, was at last reduced to defend itself on its own soil. The empress Maria Louisa was left regent of the empire. Joseph, as the emperor's lieutenant, had the honor of the military command. Joseph was left as counsellor of the empress, together with the prince arch-chancellor of the empire, Cambacères. The empress had instructions to follow the advice of these counsellors. If the events of the war should intercept all communication between the imperial head-quarters and the capital, and the enemy make his way to Paris, Joseph had verbal instructions from the emperor, and, after his departure, a written order, to remove the king of Rome and the empress, to proceed with them to the Loire, and to cause them to be accompanied by the grand dignitaries, the ministers, the officers of the senate, the legislative body, and the council of state. Joseph soon after had ample reason to acknowledge the judgment and foresight which had dictated these precautions. Reserve was thrown aside, and many senators no longer dissembled their opinions in favor of proclaiming Napoleon the Second, or the regency of the empress, and the lieutenantcy of Joseph under an infant emperor. Joseph then made known to his brother the necessity of concluding peace upon any terms; and when the slender corps of marshals Marmont and Mortier were brought under the walls of Paris, pursued by an enemy vastly superior, and all communication between the emperor and his capital was cut off, Joseph communicated to the empress and the arch-chancellor the last letter from his brother, which recognised and confirmed his former directions. The ministers, the grand dignitaries, and presidents of the sections of the council, were assembled, to the number of 22 members. They all admitted that the case provided for had

occurred; and that it was better to leave Paris to its own authorities, and to its own particular forces, than to hazard the fate of the emperor, and thereby endanger that of the entire empire. The minister of war (the duke de Feltre) declared that there were no arms ready, that they had been daily given out to the new levies as they departed, and were now exhausted. Thus it was unanimously decided that the government should be removed to Chartres, and thence to the Loire. But Joseph remarked, they were yet uninformed as to what enemy they had to do with; that the advancing forces might be reconnoitred, and measures adopted on the result of that reconnoissance. He offered not to set out with the empress. The ministers of war, of the administration of war, and of the marine, concurred with him, and promised not to return to the empress except in the last extremity, when they should be convinced that they were retiring before the entire mass of the allied armies. If, on the contrary, upon reconnoitring, it should appear that they had only a detached corps to resist, which they could destroy without exposing the capital, they would support the two marshals with all the means under their control. It was in the hope that the last hypothesis might prove correct, that the proclamation of king Joseph was drawn up and published that evening. The empress, her son, the court, the members of the government, the ministers, M. de la Bouillerie, treasurer of the crown, with the funds intrusted to him, took their departure. During the night, the marshals were informed of the enemy's approach. The next morning, they were in conflict with the out-posts. Joseph, accompanied by the ministers of war, of the administration of war, and of the marine, agreeably to the resolution of the council, left Paris to investigate the actual state of affairs more closely. The national guards were put under arms to maintain internal tranquillity, and posted at the different gates to prevent any insult which might be attempted by detached corps. In the morning, marshal Marmont having sent the king information that he was too weak to repel the troops then before him, the king directed marshal Mortier to reinforce him; an order which was promptly complied with. In the afternoon, an officer of engineers of the French army, taken prisoner by the enemy, had been admitted to the presence of the emperor of Russia, the king of Prussia, and the Austrian generalissimo. This officer had seen the

enemy's army drawn out, and came to make a report to the marshals, and afterwards to the king. Marshal Marmont declared that he could not hold out longer than four o'clock, nor prevent Paris from being inundated with irregular troops during the night. He demanded authority to treat for the preservation of the capital and the security of its population. Some legions of the national guards solicited permission to place themselves in line of battle outside the walls; it was refused, lest Paris might be deprived of their support where it could alone be useful—in the interior, and throughout the immense extent of its enclosure. The decision of the council under the presidency of the empress regent was literally carried into execution under these trying circumstances, when the ministers, who were with the king, admitted that the greatest part of the allied forces was under the walls of Paris. They did not leave Paris until four o'clock, when they learned that the enemy had occupied St. Denis, and that, in a few moments more, it would be too late to cross the Seine. Joseph, passing through Versailles, ordered the cavalry at the depôts in that city to follow him, and proceeded to Chartres, where he found the empress, and thence to Blois. Great censure has been cast upon king Joseph for his proclamation, in which he assured the national guard that he was not to accompany the empress, but would remain at Paris. There is little justice in the exceptions taken to his conduct. No one can doubt that such were his intentions, and those of the council which was then held, and the object of the immediate announcement of their views can be readily conceived. But a few hours afterwards, every thing was changed by the arrival of the whole allied army under the walls of Paris. There remained to king Joseph the choice of three courses—to accompany the empress to the point designated by the emperor, to remain at Paris, or to follow the army of marshal Marmont. In following the regent he did his duty. Subjected to the commands of the emperor, he was bound to obey them, and not to surrender his wife and son to the enemy. His orders, in a given case, which actually occurred, were precise, to assemble on the Loire the national authorities around the regent, and to collect at the same point all the forces he could obtain. This order was punctually complied with: the armies of the dukes of Castiglione, Albufera and Dalmatia were yet untouched;

the armies of Arragon and of Spain were disposed to receive any impulse which the emperor chose to give them: but the idea of resistance was abandoned, and the abdication of Fontainebleau left Joseph no choice but a retirement to Switzerland, where he remained until March 19, 1815, the day on which he learned the arrival of his brother Napoleon at Grenoble. He set out alone with his children, and traversed all France, from Switzerland to Paris, constantly accompanied by the cries of the people—"Long live Napoleon, the emperor of our choice! let him remember that the nation desires him alone! no aristocracy! nothing of the old régime!" The first person Joseph saw, on arriving in Paris, was the generous patriot, who, some months previously, had received from him the perilous mission to proceed to Elba, and to warn Napoleon of the assassins who had been sent against him. He had arrived in time, so that the two first who landed were arrested, and Napoleon saved. His name cannot yet be made public. Two celebrated personages contended for the honor of having saved Napoleon: one was madame de Staël, who, as the first person informed of the plot, hastened to give notice of it to Joseph, and proposed to go herself to Elba; the other was Talma, who accompanied her on her visit. Joseph presented to Napoleon the son of madame de Staël, Augustus, who was cordially received by the emperor. He was the bearer of a letter from his mother, who expressed herself to the emperor respecting "the additional act" thus: "*C'est aujourd'hui tout ce qu'il faut à la France, rien que ce qu'il faut, pas plus qu'il ne faut.*"* Joseph also introduced Benjamin Constant to Napoleon during the hundred days, who drew up the additional articles. Lafayette discussed several times with them the subject of the hereditary peerage, which Napoleon retained because he found it at his return from Elba, and because he had enemies enough without making new ones in the chamber of peers. After the battle of Waterloo, Joseph, when consulted by Napoleon, gave the same advice which Carnot and Merlin de Douai had already given: "Return to the army, and let us contend with the chamber." Napoleon thought, that he could still deliver France from its invaders, but not without the concurrence of the chambers. Joseph followed his brother to Rochefort;

* This should be remembered by the readers of the posthumous work of madame de Staël, *Dix Années d'Exil*.

both were to go to the U. States, but in different vessels, when there ceased to be a hope of passing the English squadron with the frigates. Joseph met him once more on the Isle of Aix. He offered to remain in his place in the room which he occupied, whilst Napoleon should go on board of the vessel which he (Joseph) had chartered for himself, and which was at Royan with the four individuals who accompanied him. It was otherwise decided. Joseph did not leave France until general Bertrand had informed him of the fatal resolution which Napoleon had taken. He arrived at New York, without being known, the captain and crew of the American vessel thinking him to be general Carnot, desirous of remaining incognito. By an act of the legislature of New Jersey, expressly enacted for his case, he was enabled to hold real property without becoming a citizen of the U. States. He erected a seat at a spot called Point Breeze, on the bank of the Delaware, near Bordentown, not far from Philadelphia. At this place, he has resided ever since, under the name of *count Surveilliers*, spending his time in study, in acts of benevolence, and embellishing his estate as far as his moderate means allow. We have found in the U. States the same opinion respecting him as in Naples, where we have heard his loss regretted by people of the most different classes. A like opinion respecting him is said to exist in Spain, by persons well informed of the state of that country; this land, as well as Naples, having been plunged by the Bourbons into a state of misery, from which, probably, they can be delivered only by long revolutions. It was once reported that he was collecting materials for a work on Napoleon and his time; and no one could make more important disclosures relative to the late emperor. In 1799, a novel called *Moïna*, of which a second edition was published in 1814, was attributed to Joseph, but never acknowledged by him. In the year 1820, a fire consumed his mansion at Point Breeze, upon which occasion the inhabitants of the neighboring country gave him proofs of their heart-felt interest in him. Not long after the French revolution in July, 1830, a letter signed Joseph Napoleon Bonaparte, count Surveilliers, and dated Point Breeze, Sept. 14, 1830, to a French general, who had offered to return with him to their common country, appeared in the public papers, in which he says, "*J'ai pris comme mon frère Napoléon la devise tout pour le peuple Français; je ne connais donc dans*

moi vis-a-vis de la nation que des devoirs à remplir et aucun droit à exercer, ni en mon nom, ni en celui de mon neveu. Les gouvernemens sont un besoin des peuples, c'est à eux à les créer ou à les détruire, selon leur utilité, je suis donc résigné à me conformer au vœu national légitimement exprimé." He further says, that he considers that no Bourbon, of any branch, should be placed on the throne of France; that Napoleon was called to the throne by the voice of three millions and a half of Frenchmen, uninfluenced by foreign arms, and that Napoleon abdicated in favor of his son; so that Napoleon II is the legitimate heir of the throne, until the nation should declare otherwise, which it had not done. The letter contains the following words, dictated by Napoleon, when dying, to general Bertrand for Joseph: "*que mon fils se guide par vos avis, qu'il n'oublie pas avant tout qu'il est Français; que la France ait sous son règne autant de liberté qu'elle a eu d'égalité sous le mien; qu'il prenne ma devise, tout pour le peuple Français.*" The letter professes republican principles throughout, and declares the country happy in which a republican government is suitable. Joseph also addressed a protest to the chamber of deputies at Paris, in favor of his nephew, dated New York, Sept. 18, 1830, and founded on the free choice of the French people, by which Napoleon was elevated to the throne, with his descendants, stating that Napoleon abdicated in favor of his son; that the chambers declared Napoleon II in 1815, and that he is the only legitimate heir to the throne of France, until the nation has decided otherwise, but that no other power or body can decide it. He also insists on the impossibility of a re-union between a nation and a reigning house, which founds its claim on the divine right, after they have once been separated. He appeals to the expression of the national will, and declares his willingness to submit to it, whatever may be the result.—The best work respecting the various periods of Joseph's life, is *Mémoires du Baron Fain*. There have appeared also in the public papers, letters from Joseph to Napoleon during the congress of Chatillon, entreating the latter to conclude peace; and others from Spain, to Napoleon, in which he shows how painful was his situation in Spain. These important letters are authentic. Joseph has two daughters: the elder, *Zénaïde*, is married to her cousin Charles Bonaparte, son of Lucien (q. v.); the younger, *Charlotte*, was married to her cousin Napoleon Louis,

son of Louis Bonaparte, former king of Holland (count St. Leu). Napoleon Louis Bonaparte died March 17, 1831, at Forlì, in Italy, in consequence of over-exertion during the early part of the existing commotions.

LA GUAYRA; a city and port of entry in the Colombian province of Caracas (q. v.), about four leagues north of Caracas; lat. $10^{\circ} 36' 19''$ N.; lon. $67^{\circ} 6' 37''$ W. La Guayra is surrounded by high mountains, whose crumbling fragments often cause great damage, and which shut in the view, except that of the sea, towards the north, and occasion a great heat during nine months of the year, Fahrenheit's thermometer being generally at $90-95^{\circ}$, sometimes as high as 105° . La Guayra is very healthy, notwithstanding the heat, owing to the dryness of the soil. In 1812, the place was almost totally destroyed by an earthquake. It has been since partly rebuilt. La Guayra has no port, but an open road, where vessels are any thing but safe, and is much frequented by foreign vessels, being the nearest port to Caracas, and supplying with foreign manufactures a great part of Venezuela. The chief imports are British and French manufactures, German linens, and provisions from the U. States. Before its disaster, La Guayra had about 8000 inhabitants, the garrison included; at present, there are about 6000. The wretched state of Colombia has injured its commerce.

LANCASTER COMES AFTER *Law*.

LAW, LEGISLATION, CODES. [The interest now felt in law and legal reforms must be our apology for the length of the present article. As we have thought that the views entertained respecting legislation and jurisprudence by the civilians on the continent of Europe might be not uninteresting to our readers, the article which treats of them in the *Conversations-Lexikon* has been translated, and forms the first part of the present article, extending as far as the break on page 581. The remainder, giving the common law view of the subject, and treating particularly of codification, is by an eminent American jurist.]—1. Laws are the very soul of a people; not merely those which are contained in the letter of their ordinances and statute books, but still more those which have grown up of themselves from their manners, and religion, and history. Several modern jurists, as John G. Schlosser and Hugo, have shown how little, in legislation, caprice can prevail over the silent but irresistible influence of public opinion. And even the authors of the Code Napoléon have

said, with no less elegance than truth, that no legislator can escape that invisible power, that silent judgment of the people, which tends to correct the mistakes of arbitrary legislation, and to defend the people from the law, and the lawgiver from himself. Frequent experiments have shown that laws, at variance with the manners and religious views of a people, cannot be forced upon them, however well meant, and however beneficial may have been their influence upon other nations; and that, by means of laws, a legislator can no more elevate his countrymen to a higher degree of refinement, without passing through the intervening steps, than he can reduce them again to a condition above which they have risen in the natural course of events. Hence Frederic II of Prussia was more happy in his reforms than Joseph II. For it was by no means the intention of the Prussian legislator to give his subjects a new system of law, but rather to sanction that which they already possessed; to adapt the letter of the ancient laws to the notions of right which had gained a footing in the spirit of the nation, and, above all, to remove those uncertainties which had necessarily sprung from the use of a foreign code, which had checked improvement in practice. Indeed, it is not the duty of a skilful legislator to create new laws; but only to develope those which existed prior to any express recognition, and to introduce, with prudence, those positive rules which cannot be deduced from general principles; as the determination of the length of minority, the period of superannuation, the amount of punishments, &c.; in which the principles of natural right are reduced to a practical application. To the province of the practical legislator belong also those forms which are required in the application of legal principles; as the formalities of contracts and of judicial processes, and the rules of evidence, in all which it should be kept in mind that these positive institutions do not, of themselves, constitute law, but are the mere mechanism to facilitate the use of it. They should be viewed only as the means of promoting a higher end. The view of the original ground of laws is a point on which not only the schools of European jurists differ, but on which the most important principles of public law come into collision.—2. The schools of modern jurisconsults may be reduced, in reference to their principal characteristics, to four, although these are variously modified, and, in many respects, run into one another. In the

last century, with few exceptions, the *practical* school predominated, which, on the one hand, esteemed the authority of courts and individual jurists higher than the law, and, on the other, was influenced, in an important degree, by philosophy, particularly that of Leibnitz and Wolf. Arguments were, for the most part, drawn with great logical precision, from the nature of the case. The members of this school felt themselves justified in departing from the letter of the written law, either whenever it seemed not adapted to the existing case, or reference could be made to the decisions of courts on the same point. By this school were introduced a multitude of new opinions, supposed equities, and milder punishments; and their fundamental views were not altogether erroneous. They proceeded on the true notion, that the laws of a people are the result of its own peculiar character, and must take their hue from this. They tried to help the letter of the old laws by deductions from the nature of things, and, by adhering to precedents, to attain to that harmony in the administration of justice, which alone can secure the public confidence. The influence exerted by this school on the legislation of the eighteenth century was very great, particularly through Nettelblatt and Daries; and the code of Prussia, in particular, may be considered as its work. But it wanted a proper system of judicial tribunals, to prevent that fluctuation in practice, in consequence of which all certainty, in regard to law, was lost, so that the result of the decision of the simplest cause could hardly be conjectured beforehand. The practical school was divided again into two parties, which agreed only in this, that the juriconsults, or the judges, might look beyond positive law; but were opposed to each other in so far that one party recognised nothing but the authority of some favorite casuist, and the usage of courts; the other regarded natural right, and what they called *reasonableness*, as the basis of all their decisions. The former almost always carried the day; for it often happened that the latter opposed them only till they had become familiar with the routine of practice, and felt themselves at home in it. In the last 10 years of the eighteenth century, new views suggested themselves to the *philosophical* jurists. A more perfect and living philosophy had examined afresh the foundations of science. Many a fabric was shattered, which had preserved the appearance of soundness only in consequence of negligence.

At the same time, society took a new turn, and every thing seemed aiming at an ideal perfection. All former obstructions in the way of legal reform appeared to be set aside. France became a republican state, and the doctrines of natural right were introduced into practice. But things have changed again, so that philosophical law has made but little advance, and has gained but little influence in courts of justice. Philosophical treatises, however, have appeared on some departments; as on criminal law, on civil process, and particularly on public and ecclesiastical law. But such works can have no real value without a profound and accurate treatment of positive law, and have, therefore, produced but little effect. The difference of opinion, in the two parties above-mentioned, has been of practical importance only on one occasion, viz. when it was proposed to prepare new bodies of law for Germany, or to take from the French legislation (which deserves so much respect in regard to public law), the rules of civil and penal law, and the forms of procedure. This plan presupposed that a code might be formed on purely philosophical principles, which, being adapted to mankind in general, would suit all nations and all times, and become the basis and essence of every other. Corrections might be made in this ground-work by degrees, as the development of the science of law pointed out deviations from the requisitions of natural justice; and the peculiarities of the legislation of each people might be added. For even those who believed that all positive legislation was based on a foundation so unalterable and eternal, could not help seeing that the additions to be made, for the purposes of practical application, must be drawn from empirical premises, which were neither suited to all people, nor constant to any given people; so that such a code, drawn from natural law, must still leave a wide field for positive legislation. This view was taken, particularly in considering the value of the French codes, the adoption of which, in Germany, had been recommended. It was inquired whether the civil code of Napoleon had solved the great problem how to establish a code based on natural justice, and capable of so universal application as to be equally adapted to people living on the Vistula and the Seine, on the Elbe, and Po, and Tiber. It was soon perceived that the Code Napoléon did not reach this ideal. On this occasion, the contest between the philosophical and historical jurisprudence came up, which was

afterwards particularly revived by Savigny's *Vom Beruf unserer Zeit zur Gesetzgebung*, 1815 (the Call for Codification in our Times). The peculiar characteristic of this third school of modern jurists—the *historical*—is, that they regard no legal principles as capable of universal and unconditional application. They view law as a mere result of the accidental relations of a people, and as changing with them. According to the principles of this school, every thing may be right, even slavery and many other things, which the philosophical school declares to be a violation of the universal rights of man, and absolutely wrong. The historical school allows a very narrow sphere to that legislation in which law is based on the will of the law-giver, and a very large one, on the contrary, to the customary law, which commences and perpetuates itself by popular usage, and the decisions of courts. Its ideal is the Roman law, as it is presented in the writings of jurists before Justinian. Every innovation in the law, on the part of government, it regards as dangerous; and especially new codes, which interrupt the silent growth of legal rules in a country. So far, this school agrees with the views of the practical school above-mentioned, from which, in fact, it originated. But it rejects all reasons deduced from a supposed nature of things (or, indeed, from philosophical opinions of right), and derives existing law, not from the decisions of courts and colleges, in which it perceives many glaring errors, but from ancient laws and law-books. It regards as truly right, not what modern times have recognised and followed as right, but what they would have esteemed right, if they had properly understood the ancient sources; and therefore considers that all improvement must be the result of a thorough examination of history. Notwithstanding the manifest inconsistency of this reasoning,—since, if the system of law, in any country, is formed by self-development, the newest shape is always the only one that ought to be recognised, and the present cannot be explained from the past,—this view has met with much acceptance, since it avers that whatever is, is right, from the very fact that it is; and in history, by which almost any principle may be proved or refuted at pleasure, it finds a means of crushing every desire of reform; but it is most favored because it declares all efforts for something higher to be both foolish and wrong. This view, however, has, doubtless, already reached its acme. It has the merit of having di-

rected to the only successful way of understanding laws by the aid of history; but the erroneous expectation cannot long be maintained, of discovering what should be, from knowing what is, and how that which is, grew up. For, although we may be set in the right way by history, yet nothing but philosophy can direct us to the proper end. History and philosophy supply each other's defects, and either of them, by itself, leads to partial views. It is only together that they can teach us the true science of law, and impart the wisdom requisite for legislation. A fourth view has been advanced, in modern times, which may be termed the *strict judicial* (*legistic*). Justly offended at the authority over the laws assumed by the practical school, and the uncertainty which had resulted from the fluctuations of their practice, impatient of the toilsome researches of a historical jurisprudence, and convinced that the philosophical school could afford materials to the legislator only, and not to the judge, a respectable number of jurists abandoned the authority of existing practice, and returned to the positive laws, though less to the spirit of them than the letter, and frequently to the letter of those laws of which the existence was scarcely known among the people. Much has been said of the injury which attends a sudden change of the laws, by introducing a new code. But, if the object of such a code is to confirm and sanction the ideas of right already prevalent among a people, it can never bring with it consequences so pernicious as followed the calling up from oblivion, and adopting into use, of antiquated laws, Roman forms and subtleties, and the cruel penal laws of the sixteenth century. In case of the literal application of these old laws, no regard can be paid to the circumstances of the age or to the peculiar character of the particular ordinances; and, in consequence of the incompleteness and want of technical accuracy in the ancient legislation, the laws of the empire, the old and new ordinances of particular countries, papal ordinances, Roman constitutions, and fragments of legal writers, are unavoidably mixed up in the most embarrassing confusion, to form a mosaic, which has the outward appearance of an organized whole, but is wholly destitute of inward, living energy. The historical school is right in maintaining that laws can be properly comprehended only by an historical examination of their development; but it has fallen into the error of the *legistic* school, in asserting that the deficiencies which are found in every

positive institution should be supplied, not from the fountain of all right, but either by the aid of historical hypotheses, which attribute the most artificial systems to nations in the early periods of civilization, or by heterogeneous additions from wholly different systems of legislation. In so doing, the historical school have particularly forgotten that the objects of their veneration, the juridical classics of Rome, owed their greatness to a perpetual habit of reverting to the maxims of natural law (their *æquitas*). Even the Roman lawyers recognised a universal right, which exists prior to all positive legislation, and without it, and, at the same time, in and with it—the rule of conduct wherever the precepts of positive law have not yet reached. There is an important difference between a maxim of law created by a positive ordinance, and one only acknowledged by it as already existing in natural equity. In the first case, the law cannot extend beyond the immediate object of its creation: in the second, it is of universal application. Of special importance is this distinction in deciding concerning relations and acts without the bounds of a state,—for example, a crime committed abroad,—cases in which positive law has a very limited application. But, however narrow the last-mentioned *legistic* view may be, it has effected much good, by bringing to light the imperfection, and, in some senses, the utter worthlessness, of the existing positive law, and thus aided to promote the reform, which, in several German states, is so necessary.—3. If the question should arise, From what public organ the improvement of laws should proceed, it may be answered, The various juridical theories exhibit a great practical difference. But, at least, the two principal parties—the historical and philosophical—are perfectly agreed in the opinion, that mere caprice, which sees in laws only a means of promoting its own favorite ends, should be, as far as possible, excluded: and it is also agreed, that legislation is an office with which neither the judiciary nor the executive departments can be concerned, without injury to each of them. Nothing can defend men from the arbitrary exercise of power but a separation of the executive, legislative and judicial authorities; for in no other way can each of these three powers be kept within its natural limits. The great discrepancy, both in the intrinsic nature of these powers, and in the character of their results, makes it important that each of them should be adminis-

tered by a separate organ. To govern is the business of the state. The executive government is the organ of the people's will. The characteristic of its acts is command. Such commands, however, are not irrevocable, for, at any moment, they may be repealed. Opinions contrary to them may be advanced; and, if they encroach on previous rights, the aid of courts may be enlisted in opposition to them. Law, on the contrary,—and, on this point, the philosophical and historical jurisprudence agree,—is founded, not upon any will, but on the discovery of a right already existing, which is to be drawn either from the internal legislation of human reason, or the historical development of the nation. The law, too, is not irrevocable, nor can any sanction make it so; but, as long as it exists, it is of irresistible and universal force. Finally, the judicial decision is binding only on those who have occasioned its application by resorting to judicial proceedings; but, for such, it is an unchangeable rule, and no power whatever can subvert it. The different character of these public functions must not only be obvious in their external forms, so as to be understood by every one who would know his duty, but the very nature of the provisions which they require for their operation is so different as to furnish sufficient ground for making the executive, legislative and judicial departments distinct in their organization. But it is a great error of modern (constitutional) politics, that they have conceived of this division of duties, as if all connexion and mutual influence of the three powers must be done away; hence the election of judges by the people, and a legislation which could be neither urged nor restrained by the executive (no veto, or only a limited one). This very naturally produced political dissensions, which could only end in the ruin of the state. But, if the executive power is what it ought to be, nothing can be done in the commonwealth without its orders; and both the legislative and judiciary departments must receive from it the impulse of their activity. The convocation of the legislative body, and the proposal of laws, belong to it; and without its consent, no law can become obligatory upon the people. The execution and promulgation of the laws necessarily rest with the executive, and are necessarily joined with an unlimited veto. On the other hand, the influence of the executive government on the legislative should be merely a negative influence, and on the administration of justice,

a formal one; i. e. no law should be passed without its consent, and the judges should receive their offices from the executive, while the executive is to see that they do their duty; but how they shall speak cannot be prescribed to them. (See *Courts*.) This is the only means by which unity and harmony, in the action of the public authorities, can be maintained, while every branch of power is supported by the other, and kept in the right path. The entire separation of these three powers is an error which, wherever it has existed, in ancient or modern times, has brought upon the people as great sufferings as if they had been subject to an arbitrary and unlimited dominion.—4. The historico-philosophical view of the sources of laws leads us to results concerning the organization of the legislative authorities, which, it is to be regretted, have been often too much overlooked. The consequence of the unreasonable notion, that legislation is an act of the will, was an idea that the general will of the people might be ascertained, if all the different interests to be found in the people could be brought together; or, as this is, in fact, impossible, it was considered sufficient to unite, in representative assemblies, the most important interests—those of agriculture, commerce and manufactures. In respect to the administration of government, and the judicious choice of means to promote the high ends of the state, this sort of representation may be found sufficient. But, when the question is respecting the establishment of laws, in the highest sense of the word, the most comprehensive intelligence is required. A popular representation, for this purpose, should not represent the fluctuating, capricious will of the people, influenced, as it is, by interest, prejudice and passion. On the contrary, it should be a mirror to reflect all the intellectual power of the nation. Consequently the representatives should be chosen from the most learned, and enlightened, and experienced men, who have the best opportunity to become acquainted with the wants of the people and the defects of the existing laws. That it cannot be concluded that a man possesses these qualifications, because he owns a piece of ground, is very clear. And it is equally manifest, that it is a great mistake to esteem such a possession a security for good intentions. Disinterestedness is no consequence of wealth, but of the habit of self-denial; and he learns it much more perfectly who has been inured to it from his youth, than one who has, perhaps, never known a

want. To regard landed proprietors as the proper citizens, and others as mere tolerated tenants of the state, is an absurdity. Landed property is the offspring of the state, and not *vice versa*; and the state cannot so distribute the soil, that it may depend on the will of the owner to deprive others of the means of subsistence. The more a natural, distinct interest separates landed proprietors, and, indeed, in some sense, the cultivators of the soil also, from the rest of the community, the more should it be made a main object of public institutions to prevent one party from gaining a decided and permanent superiority. But political institutions now have frequently the opposite tendency—a circumstance which, in some places, has had a remarkable influence on taxation. The second consequence, resulting from the view of legislation here proposed, is, that the number of representatives needs not be proportionate to the number of the people. In a large state, a larger number of deputies is not needed to represent the intellectual capacity of the people; and a small state, if it regards the ends of legislation, properly needs as many persons in its representative assembly as the larger. For it should comprehend so many different kinds of knowledge and talent, that no subject may arise on which a judicious decision cannot be made by the body, by the aid of persons within itself; and that the laws may all have the stamp of moderation, arising from due attention to all interests, which often leads, though by no means necessarily, to half measures. This is the greatest difficulty for smaller states, and they can only prevent it by accommodating their legislation to that of their neighbors. The management of the public affairs of communities, from the village up to the state, cannot be called legislation, in the sense in which we are now considering the subject: these may be suitably administered by even the smallest state. But if a small state undertakes to establish a peculiar system of civil rights, of legal procedure, of penal laws, &c., it will receive less advantage from such an insulated system than of injury, from the bars to intercourse with its neighbors, which must result from such institutions. Hence it is altogether desirable that, in states which are only minor divisions of one nation, having the same religion, manners and cultivation, the municipal laws, and the institutions for their administration, should, as far as possible, be made common to the whole, although matters of political administration might be kept dis-

tinct. Thus they might secure to themselves the advantages enjoyed by larger states, in the preparation of like laws by experienced colleges (as the French council), or by juridical commissions, so as to be accommodated to all the existing institutions. Representative assemblies would be freed from the embarrassment of deliberating and deciding upon topics, of which perhaps few, perhaps not a man among them, has any knowledge. But this is not to be observed in small states only: very large ones sometimes suffer still more from this evil; for though, on one side, the mass of knowledge united in the body is greater, on the other, a greater number of ignorant men embarrass and confuse: and while too many take part in making laws, but few take an interest in the subject. The thoughtlessness with which this important duty has been performed in England till the present time, is shown by Miller, in an Inquiry into the present State of the Statute and Criminal Law of England (London, 1822). The people of England, therefore (the paradise of the customary law), are at length beginning to feel the urgent need there is of reducing the chaos of single enactments into general codes. This is called the *consolidation of laws*. Several learned individuals have undertaken to make such compends. [So far the German article.]

We now propose to offer some observations, explanatory of the views of lawyers accustomed to the jurisprudence of the common law, on this interesting subject. Civilians are (it seems from the preceding part of this article) divided into several schools, professing different opinions, and actuated by different principles. The course of the common law naturally leads those who are engaged in its studies to take practical rather than theoretical views of almost every department of it. Hence they can hardly be said to be divided into different schools, or to indulge much in what may be called *philosophical, historical or antiquarian* inquiries. The actual system, as it exists, is that which they principally seek to administer; and it is only occasionally that very gifted or bold minds strike out into new paths, or propose fundamental reforms. In the present age, however, a spirit of inquiry is abroad, and the value and extent of codification have, among other topics, been matter of warm controversy among practical lawyers, as well as practical statesmen. We shall speak of this subject in the sequel. Legislation, in its broadest sense, includes those exercises of sovereign

power, which permanently regulate the general concerns of society. Its chief object is to establish laws. And by a *law*, we understand a rule, prescribed by the sovereign power of a state to its citizens or subjects, declaring some right, enforcing some duty, or prohibiting some act. It is its general applicability, which distinguishes it from a single edict, or temporary and fugitive order of the sovereign will. It is supposed to furnish a permanent and settled direction to all who are embraced within its scope. It is not a sudden executive direction, but an announcement of what is to govern and direct the rights and duties of the persons to whom it applies, in future. The rule being prescribed, it becomes the guide of all those functionaries who are called to administer it, and of all those citizens and subjects upon whom it is to operate. Neither is supposed to be at liberty to vary its obligations, or evade its provisions. But as, in the ordinary course of affairs in free governments, every person has a right, where the matter admits of judicial discussion, to litigate the question, what are the true object and meaning of a law, and how far it bears upon his rights, privileges, or duties,—it is understood, that in free governments, and especially in republics, the ultimate adjudication of what the law is, and how far it applies to a given case, is to be definitively settled by the judicial department of the government. It would be obviously unfit for the legislative department to settle retrospectively, as to past cases, what was its own meaning, its true office being to prescribe rules for the future. And though the executive department may, in the first instance, settle for itself what the law requires, its decisions cannot, and ought not to be final; for it has no means to call the proper parties before it to litigate the question, and no power to decree any judgment. Its proper function is to administer the law, and not to make it; to act upon its true construction, and not to fix it. Otherwise, the fundamental principle of a republican government would be overturned; and laws would be, not settled rules of action to be judged of by courts upon the litigation of parties, deriving their rights from, or in opposition to them; but would be arbitrary decisions of the sovereign power, without appeal and without inquiry. In the American states, this principle is thought so fundamental, that our constitutions of government expressly separate the legislative, executive and judicial departments from

each other, and assign to each appropriate duties. It is thought that in no other way can the private rights and the public liberties of the people be secure. A departure from this doctrine would be deemed a direct advancement towards despotism. When, then, in America and England, it is asked what the law is, we are accustomed to consider what it has been declared to be by the judicial department, as the true and final expositor. No one is at liberty to disregard its exposition. No one is deemed above or beyond its reach, as thus declared. If it is supposed to be misconstrued, or rather not to carry into full effect the legislative will, a new or declaratory law is passed, and furnishes the appropriate remedy. And this leads us to remark, that the difference between civilians and common lawyers, in respect to the value and obligatory force of former decisions (which we call *precedents*), is most important. The opinion of no jurist, however high or distinguished is his reputation or ability, is of the least importance in settling the law, or ascertaining its construction, in England or the United States. So far as he may, by his arguments, or counsels, or learning, instruct the court, or enlighten its judgments, they have their proper weight. But if the court decide against his opinion, it falls to the ground. It has no farther effect. The decision becomes conclusive and binding, and other courts are governed by it, as furnishing for them the just rule of decision. No court would feel itself at liberty to disregard it, unless upon the most urgent occasion, and when it interfered with some other known rule or principle; and even then, with the greatest caution and deference. In countries where the common law prevails, it is deemed of infinite importance, that there should be a fixed and certain rule of decision, and that the rights and property of the whole community should not be delivered over to endless doubts and controversies. Our maxim, in truth, and not in form merely, is, *Misera est servitus, ubi jus est vagum aut incertum*. All this (it seems) is different in the civil law countries. There, the celebrity of a particular jurist may introduce a decisive change in the rule, or at least in the administration, of the law; and even different schools of opinion may prevail in different ages. Precedents have not, as with us, a fixed operation and value; and judicial tribunals consider, that a prior decision governs only the particular case, without absolutely fixing the principles involved in it. The practice under

the common law has been found to be very beneficial; and, experience having given it a sanction and value which supersede all theory and reasoning about it, it is not often that the matter is discussed upon abstract or philosophical views. But there are many grounds, which might be urged in support of this practice, which are capable of vindicating it in the most philosophical discussions. The question, in its most general form, must involve this inquiry, What is best for society, with a view to its interests, its security, its permanency? Now, it may not be irrelevant to remark, that in every modern government, practically free, the common law rule has prevailed by general consent; and in those of the American states which were formerly under the civil law jurisdiction, there has been no desire ever expressed to retain their own rule. On the contrary, the common law rule has been eagerly adopted. It is not our purpose to enter into a review of all the grounds on which the common law rule might be vindicated; but there are one or two which deserve attention. In the first place, the rule has the advantage of producing certainty as to rights, privileges and property. In the next place, it controls the arbitrary discretion of judges, and puts the case beyond the reach of temporary feelings and prejudices, as well as beyond the peculiar opinions and complexional reasoning of a particular judge; for he is hemmed round by authority on every side. In the next place, the consciousness, that the decision will form a permanent precedent, affecting all future cases, introduces necessarily great caution and deliberation in giving it. If the case only were to be decided, it might be disposed of upon sudden impressions, and upon circumstances of hardship or compassion, or kindness, or special equity. But as the principles involved in it are to govern all future cases, and those principles must be derived from other analogies of the law, and be consistent with them, there are very strong restraints upon the judgment of any single judge. And there can be no permanent evil attendant upon any adjudications of this sort; for the legislative power may always apply the proper amendatory corrective at its will. And if the judges are actuated by corrupt motives, they may be removed by impeachment. It is no small proof that the system works well, that, in the course of many ages, very few decisions (comparatively speaking) have been overturned by the courts themselves, and that the legislature has not often found it

necessary to change the rule prescribed by the courts. In fact, positive laws have been amended a hundred times, by the legislature, where one judicial rule has been interfered with. The changes which have been wrought in the fabric of the laws, have not so much arisen from misapplication of principles by the courts, as from the new state of society having rendered the old institutions and laws inexpedient or inconvenient. The circumstances which have been thus alluded to, have introduced a general and settled course of interpreting the laws, in countries governed by the common law. No such thing is known, in our jurisprudence, as a philosophical, or historical, or practical school of interpretation. And our laws are not subject to any varieties of interpretation grounded upon the present predominance of either of them. Certain maxims were early adopted, and they have never been departed from. Supplementary and auxiliary maxims of interpretation have necessarily been introduced. But, when once incorporated into the system, they have been deemed conclusive and obligatory. The sense of a law once fixed by judicial interpretation, is for ever deemed its true and only sense. Among the rules of interpretation belonging to and fixed in the common law, we shall enumerate a few, some of which, indeed, may be truly said to belong to the universal elements of rational jurisprudence. It is, perhaps, the exactness and uniformity with which they are applied, by our judicial tribunals, which give them their principal value.—Laws may be divided into the following classes: declaratory laws; directory laws; remedial laws; and prohibitory and penal laws. Declaratory laws, except so far as they operate upon future rights, are not within the scope of the legislative power in the United States. Our legislatures can only declare what the law shall be, not what it has been, or is; how it shall govern rights in future, not how it shall act upon the past. Directory laws are those which prescribe rules of conduct, or limit or enlarge rights, or point out modes of remedy. Remedial laws are those whose object it is to redress some private injury, or some public inconvenience. Prohibitory and penal laws are those which forbid certain things to be done or omitted, under a penalty, or vindictory sanction. In the nature of things, there is not any indispensable reason why the same rule should be uniformly applied in the interpretation of all of these different sorts of laws. We shall see that the common law

allows some distinction in this respect. The fundamental maxim of the common law, in the interpretation of statutes, or positive laws, is, that the intention of the legislature is to be followed. This intention is to be gathered from the words, the context, the subject matter, the effects and consequences, and the spirit or reason of the law. But the spirit and reason are to be ascertained, not from vague conjecture, but from the motives and language apparent on the face of the law. 1. In respect to words, they are to be understood in their ordinary and natural sense, in their popular meaning and common use, without a strict regard to grammatical propriety or nice criticism. But the ordinary sense may be departed from, if the context or connexion clearly requires it; and then such a sense belonging to the words is to be adopted as best suits the context. 2. Again: terms of art and technical words are to be understood in the sense which they have received in the art or science to which they belong. 3. If words have different meanings, and are capable of a wider or narrower sense, in the given connexion, that is to be adopted which best suits the apparent intention of the legislature, from the scope or the provisions of the law. 4. And this leads us to remark, that the context must often be consulted, in order to arrive at a just conclusion, as to the intent of the legislature. The true sense in which particular words are used in a particular passage, may be often determined by comparing it with other passages and sentences, when there is any ambiguity, or intricacy, or doubt, as to its meaning. 5. And the professed objects of the legislature in making the law often afford an excellent key to unlock its meaning. Hence resort is often had to the preamble of a statute, which usually contains the motives of passing it, in order to explain the meaning, especially where ambiguous phrases are used. 6. For the same purpose, the subject matter of the law is taken into consideration; for the words must necessarily be understood to have regard thereto, and to have a larger or narrower meaning, according as the subject matter requires. It cannot be presumed, that the words of the legislature were designedly used in a manner repugnant to the subject matter. 7. The effects and consequences must also be taken into consideration. If the effects and consequences of a particular construction would be absurd, and apparently repugnant to any legislative intention deducible from the objects or context of the

statute, and another construction can be adopted, which harmonizes with the general design, the latter is to be followed. But in all such cases, where the effects and consequences are regarded, they are not permitted to destroy the legislative enactment, or to repeal it, but simply to expound it. If, therefore, the legislature has clearly expressed its will, that is to be followed, let the effects and consequences be what they may. But general expressions, and loose language, are never interpreted so as to include cases which manifestly could not have been in the contemplation of the legislature. 8. The reason and spirit of the law are also regarded; but this is always in subordination to the words, and not to control the natural and fair interpretation of them. In short, the spirit and the reason are derived principally from examining the whole text, and not a single passage; from a close survey of all the other means of interpretation, and not from mere private reasoning as to what a wise or beneficent legislature might or might not intend. Cases, indeed, may readily be put, which are so extreme, that it would be difficult to believe that any rational legislature could intend what their words are capable of including. But these cases furnish little ground for practical reasoning, and are exactly of that class, where, from the generality of the words, they are capable of contraction or extension, according to the real objects of the legislature. These objects once ascertained, the difficulty vanishes. This natural, and sometimes necessary limitation upon the use of words in a law, we often call construing them by their *equity*. In reality, nothing more is meant, than that they are construed in their mildest, and not in their harshest sense, it being open to adopt either. 9. For the same purpose, in the common law, regard is often had to antecedent and subsequent statutes upon the same subject; for, being *in pari materia*, it is natural to suppose, that the legislature had them all in their view in the last enactment, and that the sense which best harmonizes with the whole, is the true sense. 10. For the like reason, words and phrases in a statute, the meaning of which has been ascertained (especially in a statute on the same subject), are, when used in a subsequent statute, presumed to be used in the same sense, unless something occurs in it to repel the presumption. 11. As a corollary from the two last rules, it is a maxim of the common law, that all the statutes upon the same

subject, or having the same object, are to be construed together as one statute; and then every part is to be taken into consideration. 12. Another rule is, to construe a statute as a whole, so as, if possible, or as nearly as possible, to give effect, and reasonable effect, to every clause, sentence, provision, and even word. Nothing is to be rejected, as void, superfluous or insignificant, if a proper place and use can be assigned to it. 13. If a reservation in a statute be utterly repugnant to the purview of it, the reservation is to be rejected; if the preamble and the enacting clauses are different, the latter are to be followed. But the reservation may qualify the purview, if consistent with it, and the preamble control the generality of expression of the enacting clauses, if it gives a complete and satisfactory exposition of the apparent legislative intention. 14. The common law is also regarded, as it stood antecedently to the statute, not only to explain terms, but to point out the nature of the mischief, and the nature of the remedy, and thus to furnish a guide to assist in the interpretation. In all cases of a doubtful nature, the common law will prevail, and the statute not be construed to repeal it. 15. Hence, where a remedy is given by statute for a particular case, it is not construed to extend so as to alter the common law in other cases. 16. Remedial statutes are construed liberally; that is, the words are construed in their largest sense, so far as the context permits, and the mischief to be provided against justifies. By remedial statutes, we understand those whose object is to redress grievances, and injuries to persons, or personal rights and property, in civil cases. Thus, statutes made to suppress frauds, to prevent nuisances, to secure the enjoyment of private rights, are deemed remedial. 17. So statutes are to be construed liberally which concern the public good; such as statutes for the advancement of learning, for the maintenance of religion, for the support of the poor, for the institution of charities. 18. The general rule is, that the sovereign or government is not included within the purview of the general words of a statute, unless named. Thus, a statute respecting all persons generally, is understood not to include the king. He must be specially named. But, nevertheless, in statutes made for the public good, which are construed liberally, the king, although not named, is often included by implication. 19. On the other hand, penal statutes, and statutes for the punishment of

crimes, are always construed strictly.—The words are construed most favorably for the citizens and subjects. If they admit of two senses, each of which may well satisfy the intention of the legislature, that construction is always adopted which is most lenient. No case is ever punishable, which is not completely within the words of the statute, whatever may be its enormity. No language is ever strained to impute guilt. If the words are doubtful, that is a defence to the accused; and he is entitled, in such a case, to the most narrow exposition of the terms. This rule pervades the whole criminal jurisprudence of the common law, and is never departed from under any circumstances. It is the great leading principle of that jurisprudence, that men are not to be entangled in the guilt of crimes upon ambiguous expressions. But it is not to be understood, that the statute is to be construed so as to evade its fair operation. It is to have a reasonable exposition, according to its terms; and, though penal, it is not to be deemed odious. 20. Private statutes, also, generally receive a strict construction; for they are passed at the suggestion of the party interested, and are supposed to use his language. 21. Statutes conferring a new jurisdiction, and, especially, a summary jurisdiction contrary to the general course of the common law, are construed strictly. They are deemed to be in derogation of the common rights and liberties of the people under the common law, and are on that account jealously expounded. There are many other rules, of a more special character, for the construction of statutes, which the extreme solicitude of the common law to introduce certainty, and to limit the discretion of judges, has incorporated into its maxims. But they are too numerous to be dwelt upon in this place. They all, however, point to one great object—certainty and uniformity of interpretation; and no court would now be bold enough, or rash enough, to gainsay or discredit them. On the contrary, it is the pride of our judicial tribunals constantly to resort to them for the purpose of regulating the necessary exercise of discretion in construing new enactments. The legislative power of a government is generally coëxtensive with its sovereignty; and therefore embraces every thing which respects the concerns of the society. But it is in fact employed, if not universally, at least generally, in mere acts of amendment and supplement to the existing laws and institutions. Its office is ordinarily

not so much to create systems of laws, as to supply defects, and cure mischiefs in the systems already existing. The question is often discussed in our day, how far it is practicable to give a complete system of positive law, or a complete code of direct legislation. And, if practicable, the farther question arises, how far it is desirable, or founded in sound policy. These questions have been the subject of ardent controversy among the civilians and jurists of the continent of Europe, living under the civil law; and, as may well be supposed, different sides have been taken by men of distinguished ability and learning; and the controversy is, and probably for a long period will be, pursued with great animation and powers of reasoning. In the countries governed by the common law, and especially in England and the U. States, the same questions have of late been matter of wide discussion among the legal profession, as well as among statesmen, and a great diversity of opinion has been exhibited on the subject. It will be our object, in the sequel of these remarks, to put the reader in possession of some of the main grounds of the controversy. The legislation of no country, probably, ever gave origin to its whole body of laws. In the very formation of society, the principles of natural justice, and the obligations of good faith, must have been recognised before any common legislature was acknowledged. Debts were contracted, obligations created, property, especially personal property, acquired, and lands cultivated, before any positive rules were fixed, as to the rights of possession and enjoyment growing out of them. The first rudiments of jurisprudence resulted from general consent or acquiescence; and when legislation began to act upon it, it was rather to confirm, alter, or add to, than to supersede, the primitive principles adopted into it. We, in fact, know of no nation, or, at least, of no civilized nation, whose history has reached us, in which a positive system of laws for the exigencies of the whole society was coëval with its origin; and it would be astonishing if such a nation could be found. Nations, in their origin, are usually barbarous or rude in their habits, customs and occupations. They are scanty in population and resources, and have neither the leisure, nor the inclination, nor the knowledge, to provide systems for future use, suited to the growing wants of society, or to their own future advancement in the arts. A few positive rules suffice, for the pres-

ent, to govern them in their most pressing concerns; and the rest are left to be disposed of according to the habits and manners of the people. Habits soon become customs; customs soon become rules; and rules soon fasten themselves as firmly upon the existing institutions, as if they were positive ordinances. Wherever we trace positive laws, in the early stages of society, they are few, and not of any wide extent; directions for special concerns, rather than comprehensive regulations for the universal adjustment of rights. No man can pretend that, in Asia, any such universal rules were established by positive legislation, at the origin of the great nations by which it is peopled. The instructions of Moses, as promulgated by divine authority, for the government of the Jews, are not (as every one perceives) designed for every possible exigency of contract, or right, or injury, or duty, arising in the course of the business and history of that wonderful people. They are rather positive precepts, adapted to great occasions, and to govern those concerns which respected their wants, their spiritual advancement, and their duties as the chosen people of God. The Greeks are not known to us, in their early or later history, as having had a code of universal extent. The Romans, in their early history, had few positive laws; and those seem to have been borrowed from other sources. We often, indeed, see it stated, that the common law of England was originally formed from statutes now obsolete and unknown. But this assertion is wholly gratuitous. There is no reason to suppose that, in the early history of its jurisprudence, more was done than is usual in other nations, at the same period of their progress, such as the promulgating of some leading regulations, or the forming of some great institutions for the security of the public. In fact, a great portion of the English common law is of modern growth, and can be traced distinctly to sources independent of legislation. The commercial law of England is not two centuries old, and scarcely owes any thing important to positive legislation. In truth, the formation of codes, or systems of general law, for the government of a people, and adapted to their wants, is a business which takes place only in advanced stages of society, when knowledge is considerably diffused, and legislators have the means of ascertaining the best principles of policy and the best rules for justice, not by mere speculation and theory, but by the results of experience, and the reasoning

of the learned and the wise. Those codes with which we are best acquainted, are manifestly of this sort. The institutes, and pandects, and code of Justinian, were made in the latter ages of Roman grandeur—nay, when it was far on the decline,—not by instituting a new system, but by embodying the maxims, and rules, and principles, which the ablest jurists had collected in different ages, and from all the various lights of reason, and juridical decision, and general experience. No man imagines that Rome, in her early history, was capable of promulgating, or of acting upon, such a system. And this system, large as it was, has no pretension to be deemed complete, even for Rome itself. It left an infinite number of human concerns undecided by its text, which were, of course, to be submitted to judicial decision, and to receive the judgment of the wise men, who should be called, from time to time, to declare the law *ex æquo et bono*. It may indeed be assumed, as a general truth, that the body of every system of law which has hitherto governed human society, had its origin as customary law; and if it has ever assumed the form of positive legislation, it has been to give it greater sanctity and extent, as well as greater uniformity of operation. This is certainly true in respect to the common law. That system, as administered in England and the U. States, is, as compared with the positive code, or statutes, of an immeasurably wider extent, both in its principles and its practical operation. A man may live a century, and feel (comparatively speaking) but in few instances the operation of statutes, either as to his rights or duties; but the common law surrounds him, on every side, like the atmosphere which he breathes. Returning, then, to the question before stated, it may be inquired, whether it be practicable, in a refined and civilized state of society, to introduce a positive code, which shall regulate all its concerns. That such a code could be formed in a rude or barbarous age, so as to be adapted to all their future wants and growth, in passing from barbarism to refinement, seems absolutely incredible. That it could be formed in a refined age, when learning, and large experience, and enlightened views, and a sagacious forecast, might guide the judgments of the legislature, is the point before us. In the first place, it has never yet been done by any people, in any age. The two most illustrious instances of codification are that of Justinian and that of Napoleon. Neither of these purports to

be a complete system of laws and principles, superseding all others, and abolishing all others. As far as they go, they purport to lay down positive rules to guide the judgment of all tribunals, in cases within them. But other cases are left to be decided as they may arise, upon such principles as are applicable from analogy, from reasoning, from justice, from the customary law, or from judicial discretion. A positive prohibition to decide in cases not provided for by these codes, is not contained in either. But is it possible to foresee, or to provide beforehand, for all such cases? Society is ever varying in its occupations and concerns, in its objects and its pursuits, in its institutions, its pleasures, its inventions, its intelligence, and, in short, in innumerable relations and diversities of measures and means. How is it possible to foresee, or to limit, these relations or diversities? How is it possible, especially in free governments, to reduce all human acts to the same positive elements? to prevent contracts, and obligations, and rights, and equities, and injuries, and duties, from becoming mixed up in an infinite series of permutations and combinations? Until it has been ascertained what are the utmost limits of human relations, and those limits, with all their intermediate details, can be clearly defined, in every shade of difference, how can any system of laws be adequate to provide for, or to guard them, or to fix the rights growing out of them? To suppose that man is capable of all this, is to suppose that he is omniscient, all-wise, and all-powerful; that he is perfect, or that he can attain perfection; that he can see all the future in the past, and that the past is present to him in all its relations. The statement of such a proposition carries with it its own refutation. While man remains as he is, his powers, and capacities, and acts, must forever be imperfect. But it may be said, that a positive code may be framed, and a declaration made that it shall be deemed the sole guide and rule, and that all other rules shall be prohibited. Certainly this may be done. But the effect of this would be, not to form a perfect code for all the future exigencies of society; but to declare that whatever was left unprovided for in the code, should be neither matter of right nor wrong. It would be to declare, that, as to all other transactions, now and hereafter, society should be utterly lawless; and, of course, it would be to declare, that a system confessedly imperfect, and not meeting the wants or exigencies, the

rights or the wishes of society, should still govern it. What would this be, but to provide a bad code for human concerns, which it could not measure or manage? From these considerations, we may assume it as a concession granted on all sides, that a perfect code, to regulate all present, and, *a fortiori*, all future concerns of any civilized society, by positive rules, applicable to them, is morally impossible. The only real question is, whether a positive code can be provided, adequate, in a general sense, to the present known wants of society. That codes may be formed, more or less comprehensive, to regulate many or few concerns, to supply defects, or to give symmetry and order to the law on particular subjects, cannot be doubted. It has been often done. Perhaps no civilized nation has ever existed, in which there was not, at the same time, a written and an unwritten law, or, in other words, a rule of positive institution and a rule of customary law. All special decrees and ordinances of the sovereign power are of the former kind. Many subjects are of such a nature as to require some positive rule, seeing that natural law cannot fix them upon any invariable basis. For example, there is nothing in the nature of things by which we can say, that land shall, in all possible states of society, descend to the possessor's heirs, or who those heirs shall be; that he shall have a right to dispose of them by testament or deed, and how that testament or deed shall be evidenced; whether bills of exchange and promissory notes shall be negotiable or not, and to what extent binding upon the parties. These subjects, in the origin of a society, must either be positively provided for, or no rights can exist (strictly speaking) until they have become, by usage, fixed in a particular form. But most nations, with whose history we are acquainted, have had many positive laws. And to suit their institutions to the exigencies of society, in all its changes, there must be ordinances to change the old and to frame new rules. In ancient Rome, in the modern governments of continental Europe, and especially in France and in England, great alterations have, from time to time, been made in the existing system of laws. Fundamental laws have been abrogated; amendatory provisions have been established; existing rules have been methodized, confirmed, explained, and limited; and new rules prescribed for new cases. The ordinances of Louis XIV. of 1673 and 1681, on the subject of maritime and

commercial affairs, are striking instances of this sort. The abolition of feudal tenures; the regulation of uses and charities; the allowance of last wills and testaments, made in a prescribed mode; the provisions to suppress frauds, in the statute of frauds; the registration of conveyances of lands; the negotiability of promissory notes; and, above all, the positive enactments, various and almost innumerable, in the criminal code, are illustrations of the same fact, in the history of English legislation. All these statutes furnished, to a limited extent, a code on the particular subject. And we have recently seen, in the consolidation of the criminal laws of England into a few statutes, under the auspices of sir Robert Peel, a striking instance of substantive codification of the criminal law of England, in many of its most important provisions. But the objections often urged against codes, are not meant to be applied to legislation of this sort, but to systems, which are promulgated for the government of the great concerns of nations, in all their various departments and interests. How far this can be done, has been a matter of considerable theoretical discussion. But the question has been practically answered by the celebrity of several positive codes. And among those whose success and wisdom have been most generally acknowledged, are the code of Justinian and the code of Napoleon. That either of them furnishes complete rules for all the concerns of society, or excludes the necessity of judicial interpretation, or positive legislation, cannot be affirmed. That each of them covers a vast mass of the ordinary concerns of society, and fixes, positively and clearly, a great many wrongs and rights, and points out the proper redress, in cases where rights are to be vindicated and wrongs repressed, cannot well be denied. The question, then, is fairly presented, how far codes of this sort (the only ones which, in the actual state of society, are morally possible) are desirable, and founded in sound policy. It is here, that the advocates and the opponents of codes, under the jurisprudence of the common law, meet on debatable ground. The lovers of ancient institutions, of existing laws, of customary principles, oppose codes as inconvenient and unnecessary. They hold them to be inconvenient, because they fix a stubborn rule, which shall govern future cases, instead of leaving them open to the free operations of the common law, which adapts itself to all the circumstances of

the age. They maintain, also, that codes are unnecessary; for, so far as there is any rule, it is already known in the common law; and positive legislation cannot make it more so. It is added (and it is true), that law is gradually formed, and must differ in different ages, according to the different circumstances of society; that it must be varied according to the progress or regress of a nation; that it can rarely settle comprehensive principles; and must, by degrees, thread its way through the intricacies of human actions; and that an inflexible rule might work quite as much mischief as none at all; that no legislature can make a system half so just, or perfect, or harmonious, both from want of time, and experience, and opportunity of knowledge, as judges, who are successively called to administer justice, and gather light from the wisdom of their predecessors. Most, if not all, of these suggestions, may be admitted to be correct, and yet they do not settle the controversy. In the first place, the objectors must admit, that, under the common law, there are positive statutes, which regulate many great concerns and rights of the countries governed by it. The descent and distribution of real estates, the making of last wills and testaments, the forms and ceremonies attendant upon conveyances of real estate, to say nothing of other important subjects, are, in every one of the U. States, provided for by positive statutes. Here we have a rule, which is absolute and inflexible. To say that, if found inconvenient, it may be altered, so as to suit the future interests of the particular state, is, in effect, no argument at all; for the same may be said as to any provision of a systematic code. No code is supposed to be unalterable. Again, if it be said, that the legislature may, and often does, in an early stage of society, fix great principles and institutions, and then leaves the rest to judicial decisions, and thereby shows its wisdom, the true answer is, that the same reasoning applies to all codes, however extensive, if they leave the judicial tribunals at liberty to decide upon new cases, not governed by, or necessarily included in, the terms of the code. So far as the legislature has laid down principles (whether more or less extensive is of no consequence), these govern; beyond them, all is left as before. Again, the common law is itself, as far as it goes, a system of rules. These rules are fixed, certain, and invariable, as to all cases falling within them. They are quite as unyielding as any code can be. When the common

law has declared that the eldest son shall be the sole heir, and that the half-blood shall not inherit, a court has no more liberty to depart from these rules, or to refuse to apply them to any case falling within them, upon any notion of hardship, or inconvenience, or ill adaptation to the exigencies of society, than it has a right to say, that a last will and testament shall be good, though not executed according to the requirements of a statute. In each case, it is bound, and bound to the same extent. If the question were, whether a positive code should contain a clause prohibiting courts of justice from deciding upon cases not within the purview of the code, there might be much to urge against the policy and reasonableness of such a clause; but it would furnish no objection to other parts of the code. The only point, with reference to a code, which, under this aspect, would deserve consideration, is, how far it would be desirable to provide for cases which may be foreseen, but have not, as yet, actually been subjected to legislative decision. On one side, it may be said, that it would be best to leave all such cases to be decided, as they arise, upon the result of human experience and human judgment, then acting upon all the circumstances. On the other hand, it may be said, that it is better to have a fixed, present rule, to avoid litigation, and to alter it in future, if unexpected inconveniences should arise. The reasoning on each side is sound, when applied to particular cases. On each side, it admits of question, when applied to all cases. It may be best, in many cases, to leave the rule to be made, when the case arises in judicial controversy. In others, it may be far better to establish a present rule, to clear a present doubt, or fix a limit to what is now uncertain. Take the case of a bill of exchange, or promissory note; and suppose the question were, at what time demand of payment should be made, when it was payable on time, and no rule existed, and yet there was an immense amount of property dependent upon having a fixed, uniform rule; and, until so fixed, there must be endless litigation. Can any one doubt of the benefit of a rule, such as is now fixed in the commercial law of our country, for the purpose of securing certainty, viz. that payment must be demanded on the day on which it becomes due. On the other hand, suppose it were now proposed to make a law, fixing what should be the rate of wages in all future times, in all private employments; would it not, at once, occur

to be impolitic to act upon a rule, the effects of which might immediately, or in future, press unequally and injuriously upon different interests in society? Again, it is said to be unnecessary to reduce the rules of the common law to a code, for they are as certain now as they would be in a positive code. They are even more so, because the legislature cannot be presumed able to lay down a positive rule, with all the limitations and qualifications of the common law. Now, both of these suggestions admit of a satisfactory answer. If the rule exists, and has certainty in the common law, it can be stated. If there are any known exceptions, limitations and qualifications, upon a rule, those also can be stated. If nothing beyond a particular limit is known, then legislation can, at least, go to that limit. And as to all other cases, the same uncertainty exists, both at common law and in legislation. The difficulty of the argument consists in assuming, that, because the legislature has prescribed the same rule as the common law, the courts are thereby prohibited from doing what they possessed the power to do before, in the absence of any rule, viz. to find out what is the rule that ought to govern. Now, the legislature may as well leave this power in the courts, after a code, as the common law; and it will be best, unless there is a positive prohibition to the contrary. The other part of the suggestion applies only to the point, whether the code is well or ill formed by the legislature. If badly formed, it will, of course, be proportionally bad; but that furnishes no objection to a code, but to the mode in which it is executed. Then, again, as to the suggestion that it is unnecessary, because the rule already exists in the common law, and has certainty: to this several answers may be given. In the first place, if it be conceded, that there is entire certainty in the rule, at common law, there can be no harm in making the rule positive. It may do good; for it will instruct many, in and out of the profession, in respect to their rights and duty, who are now sadly ignorant of both, or are liable to be misled by their imperfect inquiries, or their limited sources of information. Every man may be able to peruse a concise text; but every man may not have leisure or ability to study a voluminous commentary. Besides, even in relation to the doctrines of the common law, many of them lie scattered in different cases, and many of them are not so clear as not to admit of different interpretations, by minds of different learning and

ability. Even lawyers of great research and accuracy, especially where the doctrine, though on the whole clear, is matter of deduction and inference, may not, at once, come to the correct conclusion; and others of less learning and ability may plunge into serious errors. Now, it would be no small gain to have a positive text, which should give, in such cases, the true rule, instead of leaving it open to conjecture and inference by feeble minds. Again, there are many subjects of great intricacy and complexity, which can be fully mastered only by very able minds, resting, as they do, upon nice, and, sometimes, upon technical reasonings, not seen by the common reader. In such cases, the text may admit of very exact statement, but the commentaries necessary to deduce it, may be exceedingly elaborate. The demonstration, or last result, may be clear, but the steps in arriving at it, exceedingly perplexed and embarrassing. It may require an analysis by the greatest minds to demonstrate; but, when once announced, it may be understood by the most common minds. For instance, the subject of contingent remainders and executory devises is of uncommon complexity in the common law, and many a lawyer may read Mr. Fearn's admirable treatise on the subject, without feeling competent to expound all its doctrines. And yet, put every principle into a positive text, with all its limitations and restrictions (not to be made out by argument and inference, but given in a direct form), and his labors and his reasoning would be materially abridged, and certainty exist where darkness before overshadowed his mind. Again, the common law has now become an exceedingly voluminous system; and as its expositions rest, not on a positive text, but upon arguments, analogies and commentaries, every person, who desires to know much, must engage in a very extensive system of reading. He may employ half his life in mastering treatises, the substance of which, in a positive code, might occupy but a few hundred pages. The codes of Justinian, for instance, superseded the camel-loads of commentaries, which were antecedently in use, and are all now buried in oblivion. The Napoleon codes have rendered thousands of volumes only works of occasional consultation, which were before required to be studied very diligently, and sometimes in repeated perusals. Again, what is to be done in the common law, where there are conflicting decisions on the same point, or converging series of opposite doctrines,

approaching towards a conflict? The rule is here confessedly uncertain. Why should not the legislature interfere, in such a case, and fix a rule, such as, on the whole, stands upon the better reasoning, and the general analogies of the law? In point of fact, this is often done. Declaratory laws, in form, are unusual among us; but laws to clear doubts and difficulties are very common. Such interferences ought, doubtless, to be made with caution and prudence, and great deliberation. But this furnishes no just objection to a reasonable exercise of the power. But in the practice under the common law, there is a still stronger ground for interference. In the first place, what the common law is, is always open to question; and if authorities are suggested on either side, it is common enough to find the rule deduced from them, doubted, denied, or explained away, by parties in an opposite interest. Courts are bound to hear as well as to decide; and although a court may think the rule of the common law clear, from their own prior researches and reasoning, it will rarely feel at liberty to stop eminent counsel, when they deny the rule, or seek to overthrow the authorities and reasonings by which it is supported. The spirit of our tribunals, and the anxious desire, not only to do, but to appear to do justice, lead to a vast consumption of time in these discussions. If the legislature had once recognised the rule in a positive code, there would be an end of all such reasoning. The only question which could remain, would be, whether the rule were applicable to the case. In the next place, there are, upon some doctrines of the common law, a vast multitude of authorities to examine, compare and understand, which requires not only great diligence, but great skill. In some cases, there are shades of difference fit for comment; in others, *obiter dicta*, which are to be qualified; in others, doubts thrown out upon collateral heads; in others, reasoning not altogether satisfactory. Under such circumstances, what is to be done? The advocate on the one side comments on every case, and the language of every judge, which furnishes any color of support for his client. His arguments must be met and answered on the other side, not only because no advocate can know what the judges will decide, but what will be the influence upon their minds of a *dictum*, or doubt, or incidental remark or reason. It is indispensable, therefore, to examine the whole, although, perhaps, neither party doubts what the amount of

authority, on the whole, supports. On one point (we believe) a learned English judge said, many years ago, that there were then more than 170 authorities. It is most probable that the number is now doubled; and yet, upon this very point, a legislative enactment of three lines might put controversy at rest for ever. Perhaps no man in or out of the legal profession would now doubt what the rule ought to be. The difficulty is, that a rule has either been adopted which works inconveniently in particular cases, or a rule has grown out of a hasty adjudication, which subsequent judicial subtilty has been desirous of escaping from; but it is not easy to do so, without breaking in upon the acknowledged force of the rule. Hence distinctions, nice, and, perhaps, not very satisfactory, are found, as blemishes in some parts of the law, which need the legislative hand to extirpate or correct them. But it has been urged, as has been already incidentally noticed, that it is a great advantage to have law a flexible system, which will yield to the changing circumstances of society; and that a written code gives a permanence to doctrines, which would otherwise be subject to modification, so as to adapt them to the particular character of the times. This objection has been already in part answered. In respect to the common law doctrines, they cannot now be changed, whatever may be the changes of society, without some legislative enactment. They furnish a guide to all cases governed by them, until the legislature shall promulgate a new rule. Courts cannot disturb or vary them; and the question of their application to new cases is equally open, whether there be, or be not a code. The legislature can, with the same ease, vary its code as its common law. It can repeal, amend or modify either. But another principal objection is often suggested, and that is, that all the parts of the common law are not in a state susceptible of codification; and that, as we cannot form a complete system of it, one great object of a code must fail. It may be admitted, that some parts of the common law are too imperfectly settled in principles, and too little understood in practice, to allow of any exact codification. But these parts are principally obsolete, or of rare occurrence and application in the common business of life; so that, if they admitted of being reduced to a text, it may be well doubted if they were important enough to deserve it. There are other parts, again, which have

grown up in modern times, which may be admitted to be yet in an immature and forming state, in respect to which, perhaps, it were better to wait the results of experience, than to anticipate them by positive law. Conceding all this, it falls far short of establishing the inutility of a code in other departments of the common law, not open to the like objections. Because we cannot form a perfect system, does it follow that we are to do nothing? Because we cannot, without rashness, give certainty to all possible or probable details of jurisprudence, shall we leave every thing uncertain and open to controversy? There is not a single state of the Union that has not repeatedly revised, changed, and fixed, in a positive code, many of its laws. The criminal code has almost every where received, in some of its principal branches, a methodical form. Virginia, long ago, reduced some important portions of her law to a positive text. New York has recently gone much farther, and, in the form of a revised code, made very extensive alterations in her common law, as well as in her statutable law. England, in our own time, has consolidated the most important heads of her criminal jurisprudence, in a new and methodized text. No man can doubt, that revisions of this sort may be useful, and, indeed, indispensable for the wants and improvements of society, in its progress from one stage to another. The question of more or less is a mere matter of expediency and policy. It is not a little remarkable, that, in England, almost every change in the general structure of her laws, by positive legislation, has, in all ages, met with a similar objection and resistance, and, when once adopted, has been generally, if not universally satisfactory. But there are many branches of the common law which can, without difficulty, be reduced to a positive text. Their main principles are embodied in treatises, accurate and full, and there can be no want of learned men ready to form an outline of them for the consideration of the legislature. Our commercial law is generally in this state. The law of bills of exchange and promissory notes, of insurance, of shipping and navigation, of partnership, of agency and factorage, of sales, of bailments, and many kindred titles, admits of codification to a very high degree of certainty; and yet, in these branches, there is still room enough to controvert particular decisions and authorities, to make it desirable to give a positive sanction to the better doctrine, and

thus to save the profession from laborious researches, and the public from expensive litigation. The ordinance of Louis XIV, on commercial law, dried up a thousand sources of disputation; and the present code of commerce of France has settled, in a positive manner, most of the questionable points, which had been found unprovided for by that ordinance, and were resigned to judicial decision in the intermediate period. Besides, a code furnishes the only safe means of incorporating qualifications upon a general principle, which experience has demonstrated to be proper and politic. Courts often lament that a principle is established in too broad terms for the public good, and yet do not feel themselves at liberty to interpose exceptions which the principle does not sanction.—This article has already spread out into a great length, and must now be closed. The result of the whole view, as to codes, is, that neither the friends nor the opponents of them are wholly right in their doctrines or their projects; that, in every civilized country, much may be done to simplify the principles and practice of the law by judicious codification, and to give it uniformity and certainty; that How much ought to be done? is a question not admitting of any universal response, but is, or may be, different as to different countries, or, in different ages, as to the same country; that every code, to be useful, must act upon the existing institutions and jurisprudence, and not, generally, supersede them; that what, with reference to the customs, habits, manners, pursuits, interests, and institutions of one country, may be fit and expedient, may be wholly unfit and inexpedient for another; and that the part of true wisdom is, not so much to search out any abstract theory of universal jurisprudence, as to examine what, for each country in particular, may best promote its substantial interests, preserve its rights, protect its morals, and give permanence to its liberties.

LANCASTER COUNTY, the richest and most fertile in Pennsylvania, contains, at present, 27 townships. Its population, in 1810, was 53,927; in 1820, 68,358; in 1830, 76,558. It contains 7 furnaces, 14 forges, 183 distilleries, 45 tan-yards, 22 fulling-mills, 164 grist-mills, 8 hemp-mills, 87 saw-mills, 9 breweries, 5 oil-mills, 5 clover-mills, 3 cotton factories, 3 potteries, 6 carding-machines, 3 paper-

mills, 1 snuff-mill, 7 tilt-hammers, and 6 rolling-mills.

LANCASTER; a city of Pennsylvania, 13 mile west of Conestoga creek, which falls into the Susquehanna, 62 miles west of Philadelphia; lon. 76° 10' W.; lat. 40° 3' N. Population, in 1810, 5405; in 1820, 6663; in 1830, 7684; was laid out in 1730. It is a pleasant, healthy and flourishing city, finely situated in a fertile, highly cultivated and delightful country. The houses are chiefly built of brick and stone. The town has an extensive trade with the surrounding country. The inhabitants are mostly of German descent, and the German language is spoken by many of them; but the English predominates, and most parents give their children an English education. The banks are 3. The churches and places of public worship are 11;—2 German Lutheran, 1 German Reformed, 1 Presbyterian, 1 Episcopalian, 1 Roman Catholic, 1 United Brethren, 1 Methodist, 1 African, 1 Friends' meeting, 1 Independent Methodist. There is an academy with a classical and English departments; a seminary, on the plan of mutual instruction, in which 500 children of both sexes are instructed in English, and several private schools and academies. Franklin college was founded in 1787. It has a large brick building and some funds, but is not in operation. There are two libraries, a reading room, several charitable and religious societies, and a museum. Eight newspapers are published in English, and four in German. There are 17 distilleries, 4 tan-yards, 5 breweries, and 2 potteries. Lancaster was early celebrated for the excellence of its stockings, saddles, and guns, and is still famous for its rifles, and the number and excellence of the stage-coaches built here.

LEE, Francis Lightfoot, one of the signers of the declaration of independence, was born in Virginia, October 14, 1734. His education was directed by a private tutor, and he inherited an independent fortune. In 1765, he became a member of the house of burgesses of Virginia, and continued in that body until 1775, when the convention of Virginia chose him a member of the continental congress, in which he remained until 1779, when he entered the legislature of Virginia. He died at Richmond, in 1797.

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